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ggcaacagca ccatcatcct ggtgtccagg ctggacccgc accttcacac ccccatgtac 180
ttetteetea cacacetgte etteetggae etcagettea ecagtagete cateceaeag 240
ctactctata acctcagcgg gccagacaag accatcagct atgtgggctg tgctctgcag 300
ctggtcctgt tcctgggcct ggggggtgtg gagtgcctgc tgctggctgt catggcctat 360
gaccgatttg tggcgatctg caaacctctg cactacatgg tcatcatgag ccccaggctc 420
tgcgtgggcc tggtctcagt ggcctggagc tgcggtgtgg ccaactccct tggctatgtc 480
tecageaace etcageetae ecceptegeg geaceacagg gtggateaet teetetgega 540
gatgccagct ctcatcagga tggcctgtgt caacactggc cgcagtggaa ggcactgtct 600
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tegteetgge aataggeate gtgttgtege etetggtgtt catettggte teetaeggtt 660
acattgtaag ggctgtgtta caaatccgct ccgctgcagg gcggcagaag gcattcaaca 720
cgtgtggttc gcatctcacc gtggtctcgc ttttctatgg aaatatcatc tacatgtaca 780
tgcagccggg gaacagctcc tcccaggacc agggcaagtt cctcaccctc ttctacaaca 840
ttgtcacccc tctcctcaac cctctgatct acacgctcag gaacaaggag gtgaaggggg 900
cgctcagaag gctgctcctg ggtagccgag ag
                                                                   932
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tacttgttta cagtgggagg aaacctcacc atcatctgtg tgatctggac cacaccttct 180
ctacacacgc ccatgtactt cttcctggcc aacctetcct tcctagagat gtgctatatc 240
agcagtgtgg tgcctcagat gctggtgcac ctgctggtac agctcaagac cataagtgtg 300
gcaggctgtg cagctcagat gtatgtattc accatcttgg ggctgacaga gtgttgcctt 360
ctggcaacta tggcttatga tcgctttgtg gctatttgtt acccactaca ttacactctg 420
tggatggacc cttctgtctg tctgaagttg gctggtgcat cttggatgac tgggatcctg 480
gtagaatcag cccagaccac ctggatcttc actctgccct tttgtggagc aggaacaatt 540
caacactttt tctgtgacat catgcctgtg gtaaaattag cttgtgtgga tacttcccag 600
aatgaaatgg tgatatttat tatttctctt atcttcatta tgagtccctg tctcttcatt 660
ctatgctctt atgtccgcat tattctgacc atcttgaaaa tgccctcagc agcaggcaga 720
cacaaagctt tctccacctg ctcctctcat atcctggttg tttctctttt ctatggcact 780
gccttattca cttatctcca acccaagagt tcacacaccc cagacacaga caaggttact 840
gctctcatgt acactgtggt cacccetgct ctgaatcctg ttatctatac gttgaggaac 900
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<210> 1292
<211> 934
<212> DNA
<213> Mus musculus
<220>
<223> MOR150-3
<400> 1292
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ccaactgtga agcctgtgat cttttgtatc ttcctgttga tgtacatggt caccatcttg 120
ggaaatetge ttattateet tgetgtatgt tettattete atttgeaaae acceatgtae 180
ttttttattt caaatttatc cattaatgat atctgcttat ccacaactgt cattccaaat 240
atgttacgga ctactcaaac acaggatcag agcatcagtt atgcaggctg ccttactcag 300
ctttgctttg tcttgctatt tgctggattc gaaagctgtc ttcttgcagc aatggcctat 360
gaccgatatg ttgctatttg ttatccactg agttatacag tcatgatgaa ttttcattca 420
tgtgctctac taattctctt ctctgttctc attagcgttt tgaacatggg acttcttggt 480
ctcatggtat taagactatc tttctgcaca aatctagaga tccccttatt cttctgtgaa 540
ctttctcagg tcatgaagct tgcatgctct gacaccctta ttaatgatat tctgatatat 600
cttgcaacat ttatatttgg tggcatccca atctctggta ttattttctc ttatgtccaa 660
attgcttctt ctgttttgag aatatcatca gtaaaaggaa gatgtaaagc cttttccact 720
tgtggttctc acttgtcagt gacttctttg tcctatggtt caggattgtg ggtttatata 780
acctcttcag ttgctatttt acccaagaag acttcagtgg cctgcattat gtacactgta 840
gtcccacaaa tggttgaacc catttatctt tagccttcga aataaggaca tgaaaggaac 900
tatgaaaaaa ttcatcagta aagtagcttc tctt
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<210> 1293
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<212> DNA
<213> Mus musculus
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<223> MOR256-54P
<400> 1293
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cctcaactgg aacatatctt ttttgtcttc atttcaatgt tctatatcct aaccatcttt 120
ggaaacttca ccatcatcac aatctcacga atggatcagc gactacaaac accaatgtac 180
ttcttcctta acaacctctc tttcctggac ctctgctaca acaccagcat tgtacctcag 240
cttcttgtca atatttctgg aattgacaag accatgagct atgctgggtg catgacccag 300
ttcttcatag tgctcttact gggtggaact gagtgtatgc tccttgtggt gatggctttc 360
gaccgctatg tcgctgtgtg tcatccacta cactacacca gcattatgca cccccttctc 420
tgccatgcat tggccatctc ctcctgggtg ggaggccttg tgaactctct gactcagaca 480
agceteatea tgaceatace tetetgtgge cateacetga accaettett etgtgagatg 540
cttgttctcc tgaagctggc ttgtgaggac acagtgggaa cagaggccaa cttgtttgtg 600
gctggagcga ttattttggt ctgtcctgta gcactaattc taggcaccta tgcacacatt 660
gctcatgcag tgttgaagat caagtcaaga tctgggcgca gaaaggctct ggggacttgg 720
tgggtcccac cttactgggg gttttcttt tttatggctc agccatgtac atgtatctcc 780
aacctgtcca cgtgtattcc gggagtgaag gaaagtttgc tgccctcttt tatactatca 840
ttactccaat gatgaaccct gatttatacc ctaaaaaaca aaaatgtgaa ggggggcttt 900
gtgcaaggta ctagggagag atacaagcac aaca
                                                                   934
<210> 1294
<211> 948
<212> DNA
<213> Mus musculus
<220>
<223> MOR267-17
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tetacettee eteatettea getgatgtte tteetgetgt teetgeteat gtacetette 120
acactgctag gcaacctgct catcatgacc accatctgga gtgaacacag tctccacaca 180
eccatgtace tettectgtg tgecetetee atetetgaga ttttetacae etttgecate 240
atcccacgca tgttggctga cctgctcacc acacttcact ccatcgcctt tctggcctgt 300
gccagccaga tgttcttctc cttcacattt ggcttcaccc attcctttct actcaccgtc 360
atgggctatg accgctacgt ggccatctgt cacccactga gatacaatgt gctcatgagc 420
eccegtgget gtgeetgeet ggtageetgg teetgggttg gtggateatt catggggaca 480
gtggtgacga cagccatttt caacctcaca ttctgtggac ccaatgagat ccaccatttt 540
acttgtcatg ttccacctct attgaagttg gcatgtggag agaatgtact ggaggtggca 600
aagggtgtag aaatagtgtg catcacagcc ctcctgggct gctttctcct catcctcctc 660
tcatatgcct tcattgtggt taccatcttg aagataccat cagctgaggg tcggcacaag 720
gctttctcca catgtgcatc ccacctcaca gtggtggttg tacattatgg ctttgcttct 780
gtcatttacc tcaagcctaa gggccccaag tctctggaag gagatactct gatgggcatc 840
acctacacag tecteacece etteettagt eccateatet teagteteag gaacaaggag 900
ctaaagaatg ccatggaaga aagctttcct caacaaatta tttccaca
                                                                   948
<210> 1295
<211> 970
<212> DNA
<213> Mus musculus
<220>
<223> MOR15-3
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atgqtqqqca acatgaccat cataattgtt atctggcatg agcagactct tcatgttcct 180
atgtatetat teetggeeat gttageetee tetgatetgg gtetetetet gtttaeette 240
cccacactgt tgagaatctt cctgctgaat gatagagagt tgaccaccac tgcttgtttc 300
acqcaqatgt tcttcattca cactttccaa gaccttgaat cagctattat tctggcaatg 360
qccttcgatc ggtatgtggc catttctcac ccacttcact atcactccat tctcacagac 420
actgtgattg ccaagatagg cttggctatt gttgtacgaa ccttaactgt gcaggtgcct 480
ctccctatcc tcttgaagag attgtacttc tgtcattcca atgtactatc tcattcctac 540
tgtttqcatc ctgacatcat aaagctctcc tgctccagta ctactgtcaa cagtatcttt 600
ggactttttg tagtgctctc caccatgggg cttgacttcc tccttatcct actctcatat 660
gcattgattc tgaaaacagt actgaatatg gcttcccaca gtggccgcct caaggctctc 720
aacacctgca teteteatet gtgtgetgtg gteetettet teacacccat gatetgeeta 780
tocatgctgc atcgttttgg tocaaggctt coctcacatg totatgtgac cotggccaac 840
atgcactttc taattcctcc agtgatgaac cccatcgtct atgtggtgaa aaccaaggca 900
gatccgtgac aaaattcaga aactcttcat tagaaaagca acaaagaaag ctcaggctgc 960
                                                                   970
atctataaca
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<213> Mus musculus
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gggaatettg ggetggtgge egtgatetae ttggageete gtetecacae acceatgtae 180
atetttetgg geaacetgge tetgatggae teetgetget eetgtgeeat eacteeeaag 240
attctagaga acttctttc tgtagacaga aggatttctc tctatgaatg catggcacaa 300
ttctattttc tgtgtcttgc tgaaactgca gactgctttc ttctggcagc aatggcctat 360
gaccgctatg tggccatatg caaccetetg cagtaccaca gcatgatgte caagaaacte 420
tecatteaga tgagtatagg cacatteata accagtaace tgeatteett gatteatgta 480
gggtgtctct taaggttaac tttctgtaaa tctaacagaa tttgatcatt tcttctgtga 540
tattcttccc ctatatagac tctcctgtac agacccattt atcaatgaat taatgatata 600
tattttttct atgccaattc aagtcttcac cattaccact gtcttggtct cttacttctg 660
cattettete actattttea agatgaaate caaaggatgg gagaggaaaa geatttteta 720
cetgtgcate ceaetttttt tetgtgtcaa tattetatge etgtettete atgtatatta 780
gaccatttga tgacagtaat aaagacatac cagtggccat attttataca ataataattc 840
ctttgttaaa cccttttatt tacagcctga gaaatactga ggtagtaaat gcgttaagaa 900
                                                                   902
<210> 1297
<211> 307
<212> PRT
<213> Mus musculus
<400> 1297
Met Trp Ser Asn Ile Ser Ala Ala Pro Phe Leu Leu Thr Gly Phe Pro
                                    10
Gly Leu Glu Ala Ala His His Trp Ile Ser Ile Pro Phe Phe Ala Ile
                                25
Tyr Ile Ser Val Leu Leu Gly Asn Gly Thr Leu Leu Tyr Leu Ile Lys
Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Met Leu
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Ala Gly Thr Asp Leu Thr Val Thr Leu Thr Thr Met Pro Thr Val Met
                                        75
Ala Val Leu Trp Val Asn His Arg Glu Ile Arg His Gly Ala Cys Phe
Leu Gln Ala Tyr Ile Ile His Ser Leu Ser Ile Val Glu Ser Gly Val
           100
                                105
                                                    110
Leu Leu Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro Leu
                           120
                                               125
       115
His Tyr Asn Ser Ile Leu Thr Asn Ser Arg Val Ile Ala Ile Gly Leu
                       135
                                           140
Gly Val Val Leu Arg Gly Phe Leu Ser Leu Val Pro Pro Ile Leu Pro
                   150
                                        155
Leu Phe Trp Phe Ser Tyr Cys Arg Ser His Val Leu Ser His Ala Phe
                                    170
               165
Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr Phe
                                185
                                                    190
           180
Asn Arg Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu Asp
       195
                            200
                                                205
Ala Leu Ile Ile Val Phe Ser Tyr Val Leu Ile Leu Lys Thr Val Met
                        215
Gly Ile Ala Ser Gly Glu Glu Arg Ala Lys Ala Leu Asn Thr Cys Val
                   230
                                        235
Ser His Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly Leu
               245
                                    250
Thr Phe Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His Ile
           260
                                265
Thr Met Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro Ile
                           280
Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Val Leu His Leu
                    295
Leu Ser Val
305
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<210> 1298

<211> 315

<212> PRT

<213> Mus musculus

<400> 1298

Met Pro Ser Met Trp Leu Asn Ile Ser Ser Ser Pro Phe Leu Leu Thr 10 Gly Phe Pro Gly Leu Glu Lys Ala His His Leu Ile Ser Leu Pro Leu 20 25 Leu Met Ala Tyr Ile Ser Ile Leu Leu Gly Asn Gly Thr Leu Leu Phe 40 Leu Ile Lys Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu 55 60 Gly Met Leu Ala Ala Thr Asp Leu Gly Val Thr Leu Thr Thr Met Pro 70 7.5 Thr Val Leu Ser Val Leu Trp Leu Asn His Arg Glu Ile Gly His Gly 85 90 Ala Cys Phe Ser Gln Ala Tyr Phe Ile His Thr Leu Ser Ile Val Glu 100 105 Ser Gly Val Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Arg 125 115 120 Asn Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asp Thr Lys Val Ile Lys 135

```
Ile Gly Ile Gly Leu Val Met Arg Ala Gly Leu Ser Ile Met Pro Ile
Ile Ile Arg Leu His Trp Phe Pro Tyr Cys Arg Ser His Val Leu Ser
                                    170
His Ala Phe Cys Leu His Gln Asp Val Ile Lys Leu Ala Cys Ala Asp
                                185
Ile Thr Phe Asn Arg Leu Tyr Pro Val Val Val Phe Ala Met Val
                            200
Leu Leu Asp Phe Leu Ile Ile Phe Phe Ser Tyr Val Leu Ile Leu Lys
                        215
Thr Val Met Gly Ile Ala Ser Thr Asp Glu Arg Ala Lys Ala Leu Asn
                                        235
Thr Cys Val Ser His Ile Cys Cys Ile Leu Val Phe Tyr Val Thr Val
                                    250
Val Gly Leu Thr Phe Ile His Arg Phe Gly Lys Asn Val Pro His Val
Val His Ile Thr Met Ser Tyr Ile Tyr Phe Leu Phe Pro Pro Phe Met
                            280
Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Ser Gly Leu
                        295
Leu Arg Leu Phe Ser Leu Pro Cys Ser Lys Thr
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<210> 1299

<211> 311 <212> PRT

<213> Mus musculus

<400> 1299

Met Trp Pro Asn Ser Ser Asp Ala Pro Phe Leu Leu Thr Gly Phe Leu 1 5 10 Gly Leu Glu Met Ile His His Trp Ile Ser Ile Pro Phe Phe Val Ile 25 20 Tyr Phe Ser Ile Ile Val Gly Asn Gly Thr Leu Leu Phe Ile Ile Trp 40 Ser Asp His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Val Leu 55 Ala Ser Met Asp Leu Gly Met Thr Leu Thr Thr Met Pro Thr Val Leu 70 75 Gly Val Leu Val Leu Asn Gln Arg Glu Ile Val His Gly Ala Cys Phe 85 90 Ile Gln Ser Tyr Phe Ile His Ser Leu Ala Ile Val Glu Ser Gly Val 100 105 110 Leu Leu Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro Leu 115 120 125 His Tyr Asn Ser Ile Leu Thr Asn Ser Arg Val Met Lys Met Ala Leu 135 140 Gly Ala Leu Leu Arg Gly Phe Val Ser Ile Val Pro Pro Ile Met Pro 150 155 Leu Phe Trp Phe Pro Tyr Cys His Ser His Val Leu Ser His Ala Phe 165 170 Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr Phe 180 185 190 Asn Leu Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu Asp 200 Ala Leu Ile Ile Ile Phe Ser Tyr Val Leu Ile Leu Lys Lys Val Met 215 Gly Ile Ala Ser Gly Glu Glu Arg Lys Lys Ser Leu Asn Thr Cys Val

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230
                                        235
Ser His Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly Leu
                245
                                    250
                                                        255
Thr Phe Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His Ile
                                265
Thr Met Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro Ile
                            280
Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Ile Leu Arg Leu
                        295
                                            300
Leu Ser Lys His Ser Arg Thr
<210> 1300
<211> 317
<212> PRT
<213> Mus musculus
<400> 1300
Met Pro Val Ile Trp Leu Asn Thr Ser Thr Tyr Pro Phe Leu Leu Thr
                                    10
Gly Phe Pro Gly Leu Glu Lys Ser His His Leu Ile Ser Leu Pro Leu
            20
                                25
Leu Met Ala Tyr Ile Phe Ile Leu Leu Gly Asn Gly Thr Leu Leu Phe
                            40
Leu Ile Lys Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu
Gly Met Leu Ala Ala Thr Asp Leu Gly Val Thr Leu Thr Thr Met Pro
                    70
                                        75
Thr Val Leu Gly Val Leu Trp Leu Asn His Arg Glu Ile Gly His Gly
               85
                                    90
Ala Cys Phe Ser Gln Ala Tyr Phe Ile His Ser Phe Ser Ile Val Glu
            100
                                105
                                                    110
Ser Gly Val Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Arg
        115
                            120
                                                125
Asn Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asp Ile Lys Val Ile Lys
                        135
                                           140
Ile Gly Ile Gly Val Val Met Arg Ala Gly Leu Ser Ile Met Pro Ile
                    150
                                        155
Ile Ile Arg Leu His Trp Phe Pro Tyr Cys Arg Ser His Val Leu Ser
               165
                                    170
His Ala Phe Cys Leu His Gln Asp Val Ile Lys Leu Ala Cys Ala Asp
            180
                                185
                                                    190
Ile Thr Phe Asn Arg Leu Tyr Pro Ile Val Val Phe Cys Met Gly
                            200
        195
                                                205
Leu Leu Asp Phe Leu Ile Ile Cys Phe Ser Tyr Ile Leu Ile Leu Lys
                        215
                                            220
Thr Val Met Gly Ile Ala Ser Thr Asp Glu Arg Ala Lys Ala Leu Asn
                    230
                                       235
Thr Cys Val Ser His Ile Cys Cys Ile Leu Val Phe Tyr Val Thr Val
                245
                                    250
Val Gly Leu Thr Phe Ile His Arg Phe Gly Lys Asn Ile Pro His Ile
            260
                                265
Val His Ile Thr Met Ser Tyr Ile Cys Phe Leu Phe Pro Pro Phe Met
                            280
                                                285
Asn Pro Val Ile Phe Ser Ile Lys Thr Lys Gln Ile Gln Ser Gly Leu
                        295
                                            300
Leu Arg Leu Phe Ser Leu Pro Tyr Ser Arg Ile Arg Leu
                    310
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<210> 1301
<211> 314
<212> PRT
<213> Mus musculus
<400> 1301
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Thr Gly Leu Pro Gly Met Glu Thr Ser Gln His Trp Leu Phe Leu Leu
                                25
Leu Gly Val Leu Tyr Ser Val Ser Ile Val Gly Asn Ala Leu Ile Leu
Phe Ile Ile Lys Glu Glu Glu Ser Leu His Gln Pro Met Tyr Tyr Phe
Leu Ser Leu Leu Ser Gly Asn Asp Leu Gly Val Ser Phe Ser Thr Leu
                    70
Pro Thr Val Leu Gly Val Phe Cys Phe His Leu Arg Glu Ile Ser Phe
                                    90
Asn Ser Cys Met Ser Gln Met Phe Phe Ile His Leu Phe Ser Phe Met
            100
                                105
                                                    110
Glu Ser Gly Ile Leu Leu Ala Met Ser Phe Asp Arg Tyr Val Ala Ile
        115
                            120
                                                125
Cys Asn Pro Leu Arg Tyr Ser Thr Val Leu Thr Asp Ala Arg Val Met
                        135
                                            140
Trp Met Gly Val Cys Val Phe Leu Arg Ser Phe Cys Met Ile Phe Pro
                    150
                                        155
Leu Pro Phe Leu Leu Lys Arg Leu Pro Phe Cys Lys Ala Asn Val Leu
                165
                                    170
                                                         175
Ser His Ala Tyr Cys Leu His Pro Asp Leu Ile Arg Leu Pro Cys Gly
            180
                                185
                                                    190
Asp Thr Ser Ile Asn Asn Ile Phe Gly Leu Ser Ile Val Ile Ser Thr
                            200
        195
                                                205
Phe Gly Leu Asp Ser Ala Leu Ile Phe Leu Ser Tyr Val Leu Ile Leu
                        215
                                            220
Arg Ser Val Leu Ala Ile Ala Ser Arg Glu Glu Arg Met Lys Thr Leu
                    230
                                        235
Asn Thr Cys Val Ser His Leu Cys Ala Val Leu Ile Phe Tyr Val Pro
                245
                                    250
Lys Val Gly Val Ser Met Phe Ala Arg Tyr Gly Arg His Ala Pro His
            260
                                265
Tyr Val His Thr Leu Leu Ser Leu Ile Tyr Leu Phe Val Pro Pro Met
                            280
Leu Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Glu Ile Arg Arg
                        295
Phe Cys Lys Ile Leu Leu Gly Asn Lys Phe
                    310
<210> 1302
<211> 321
<212> PRT
<213> Mus musculus
<400> 1302
Met Leu Arg Pro Ser Ser Met Ser Glu Val Thr Asn Thr Thr His Gly
Pro Phe Tyr Phe Ile Leu Thr Gly Ile Pro Gly Phe Glu Asp Ile His
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Leu Trp Ile Ser Ile Pro Phe Phe Cys Leu Tyr Thr Ile Ser Ile Met
                            40
Gly Asn Thr Thr Ile Leu Thr Val Ile Arg Thr Glu Pro Ser Leu His
Glu Pro Met Tyr Leu Phe Leu Ser Met Leu Ala Leu Thr Asp Leu Gly
                    70
Leu Thr Leu Thr Thr Leu Pro Thr Val Met Gln Val Leu Trp Phe Asn
                                    90
Ile Arg Glu Ile Ser Phe Glu Ala Cys Phe Ala Gln Val Phe Phe Leu
His Gly Phe Ser Phe Met Glu Ser Ser Val Leu Leu Ala Met Ser Phe
                            120
                                                125
Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Ala Ser Ile Leu
                        135
                                            140
Thr Ser Glu Val Ile Ala Arg Ile Gly Leu Ala Ile Ile Cys Arg Cys
                    150
                                        155
Val Leu Ala Val Leu Pro Ser Leu Phe Leu Leu Lys Arg Leu Pro Phe
                165
                                    170
Cys His Ser His Leu Leu Ser His Ser Tyr Cys Leu His Gln Asp Met
            180
                                185
                                                     190
Ile His Leu Val Cys Ala Asp Ile Arg Val Asn Arg Trp Tyr Gly Phe
        195
                            200
                                                205
Ala Leu Val Leu Leu Ile Ile Val Leu Asp Pro Leu Leu Ile Val Leu
                        215
                                            220
Ser Tyr Ala Leu Ile Leu Lys Ser Val Leu Asn Thr Ala Thr Trp Thr
                    230
                                        235
Glu Arg Leu Arg Ala Leu Asn Asn Cys Leu Ser His Met Leu Ala Val
                245
                                    250
Leu Val Leu Tyr Val Pro Met Val Gly Val Ser Met Thr His Arg Phe
            260
                                265
Ala Lys His Ala Ser Pro Leu Val His Val Leu Met Ala Asn Ile Tyr
                            280
Leu Leu Ala Pro Pro Val Met Asn Pro Ile Ile Tyr Ser Val Lys Thr
                        295
                                            300
Lys Gln Ile Arg Gln Gly Ile Thr Arg Leu Leu Leu Gln Arg Lys Val
                                        315
His
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<210> 1303
<211> 317
<212> PRT
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<213> Mus musculus

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Gly Leu Val Pro Cys Val Leu Gln Gln His Phe Leu His Ser Phe Ser
                                105
Phe Met Glu Ser Ala Val Leu Phe Ala Met Ala Leu Asp Arg Leu Ile
                            120
Ala Ile Arg Phe Pro Leu Arg Tyr Ala Ser Val Leu Thr Gly Pro Arg
                        135
Val Ala Leu Ile Gly Thr Val Leu Gly Met Arg Ser Ala Ala Ile Thr
                    150
Ala Ala Pro Ser Leu His Leu Leu Thr Phe Asp Tyr Cys His Pro Gly
                                    170
Ala Leu Ser His Ala Tyr Cys Leu His Gln Asp Met Ile Arg Leu Ala
                                185
                                                    190
Cys Ser Asp Thr Arg Phe Asn Arg Leu Tyr Gly Leu Cys Ile Ile Met
                            200
Leu Ala Met Gly Ser Asp Val Leu Phe Ile Leu Leu Ser Tyr Ala Val
Ile Leu Arg Thr Val Leu Ala Ile Ala Ser Ala Gly Glu Arg Leu Lys
                    230
                                        235
Ala Leu Asn Thr Cys Val Ser His Ile Leu Ala Val Leu Cys Phe Tyr
                245
                                    250
Val Pro Val Leu Gly Leu Ser Ile Val His Arg Phe Gly Gln His Thr
            260
                                265
Ser Pro Leu Val His Ile Leu Met Gly Thr Val Ser Val Leu Phe Pro
                            280
Pro Val Met Asn Pro Val Ile Tyr Ser Ile Lys Thr Gln Gln Ile Arg
                        295
Arg Ala Ile Val Lys Val Ile Ser Leu Gly Lys Ile Gln
```

<211> 321

<212> PRT

<213> Mus musculus

<400> 1304

Met Leu His Pro Ser Ser Met Ser Glu Val Thr Asn Thr Thr His Asp 10 Pro Phe Tyr Phe Ile Leu Thr Gly Ile Pro Gly Phe Glu Asp Ile His 25 Leu Trp Ile Ser Ile Pro Leu Phe Cys Leu Tyr Thr Ile Ser Ile Met 40 Gly Asn Thr Thr Ile Leu Thr Val Ile Arg Thr Glu Pro Ser Leu His 55 Gln Pro Met Tyr Leu Phe Leu Ser Met Leu Ala Leu Thr Asp Leu Gly 70 75 Leu Thr Leu Thr Thr Leu Pro Thr Val Met Gln Leu Leu Trp Phe Asn 8.5 90 Ile Arg Glu Ile Ser Phe Glu Ala Cys Phe Ala Gln Phe Phe Leu 110 100 105 His Gly Phe Ser Phe Met Glu Ser Ser Val Leu Leu Ala Met Ser Phe 120 125 Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Ala Ser Ile Leu 135 140 Thr Ser Glu Val Ile Ala Arg Ile Gly Leu Ala Ile Ile Cys Arg Cys 155 150 Val Leu Ala Val Leu Pro Ser Leu Phe Leu Leu Lys Arg Leu Pro Phe 170 165 Cys His Ser His Leu Ile Ser His Ser Tyr Cys Leu His Gln Asp Met

```
180
                                185
Ile His Leu Val Cys Ala Asp Ile Arg Val Asn Ser Trp Tyr Gly Phe
                            200
                                                205
       195
Ala Leu Val Leu Leu Ile Ile Val Leu Asp Pro Leu Leu Ile Val Leu
                        215
Ser Tyr Ala Leu Ile Leu Lys Ser Val Leu Asn Thr Ala Thr Trp Thr
                    230
Glu Arg Leu Arg Ala Leu Asn Asn Cys Leu Ser His Met Leu Ala Val
                                    250
Leu Val Leu Tyr Val Pro Met Val Gly Val Ser Met Thr His Arg Phe
                                265
Ala Lys His Ala Ser Pro Leu Val His Val Leu Met Ala Asn Ile Tyr
                            280
Leu Leu Ala Pro Pro Val Met Asn Pro Ile Ile Tyr Ser Val Lys Thr
                                            300
                        295
Lys Gln Ile Arg Gln Gly Ile Thr Arg Leu Leu Gln Arg Lys Val
His
```

<210> 1305 <211> 326

<212> PRT

<213> Mus musculus

<400> 1305

Met Lys Val Ala Ser Ser Phe His Asn Asp Thr Asn Pro Gln Asp Val 10 Trp Tyr Val Leu Ile Gly Ile Pro Gly Leu Glu Asp Leu His Ser Trp 25 Ile Ala Ile Pro Ile Cys Ser Met Tyr Ile Val Ala Val Ile Gly Asn 40 Val Leu Leu Ile Phe Leu Ile Val Thr Glu Arg Ser Leu His Glu Pro 55 Met Tyr Phe Phe Leu Ser Met Leu Ala Leu Ala Asp Leu Leu Ser 70 75 Thr Ala Thr Ala Pro Lys Met Leu Ala Ile Phe Trp Phe His Ser Arg 90 Gly Ile Ser Phe Gly Ser Cys Val Ser Gln Met Phe Phe Ile His Phe 100 105 110 Ile Phe Val Ala Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg 120 125 Tyr Val Ala Ile Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Ser 135 140 Ser Val Ile Gly Lys Ile Gly Thr Ala Ala Val Val Arg Ser Phe Leu 150 155 Ile Cys Phe Pro Phe Ile Phe Leu Val Tyr Arg Leu Leu Tyr Cys Gly 165 170 175 Lys His Ile Ile Pro His Ser Tyr Cys Glu His Met Gly Ile Ala Arg 180 185 Leu Ala Cys Asp Asn Ile Thr Val Asn Ile Ile Tyr Gly Leu Thr Met 195 200 205 Ala Leu Leu Ser Thr Gly Leu Asp Ile Leu Leu Ile Ile Ser Tyr 220 Thr Met Ile Leu Arg Thr Val Phe Gln Ile Pro Ser Trp Ala Ala Arg 230 235 Tyr Lys Ala Leu Asn Thr Cys Gly Ser His Ile Cys Val Ile Leu Leu

```
Phe Tyr Thr Pro Ala Phe Phe Ser Phe Phe Ala His Arg Phe Gly Gly 260

Lys Thr Val Pro Arg His Ile His Ile Leu Val Ala Asn Leu Tyr Val 275

Val Val Pro Pro Met Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys 290

Gln Ile Gln Asp Arg Val Val Phe Leu Phe Ser Ser Val Ser Thr Cys 305

Gln His Asp Ser Arg Cys 325

<210> 1306

<211> 315

<212> PRT

<213> Mus musculus
```

<213> Mus musculus <400> 1306 Met Leu Gly Thr Asn Phe Thr Ile Ile His Pro Thr Val Phe Ile Leu Leu Gly Ile Pro Gly Leu Glu Gln Tyr His Thr Trp Leu Ser Ile Pro Phe Cys Leu Met Tyr Ile Ala Ala Val Leu Gly Asn Gly Ala Leu Ile Leu Val Val Leu Ser Glu Arg Thr Leu His Glu Pro Met Tyr Val Phe 55 Leu Ser Met Leu Ala Gly Thr Asp Ile Leu Leu Ser Thr Thr Thr Val 70 Pro Lys Thr Leu Ala Ile Phe Trp Phe His Ala Gly Glu Ile Pro Phe Asp Ala Cys Ile Ala Gln Met Phe Phe Ile His Val Ala Phe Val Ala 105 110 Glu Ser Gly Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 120 125 Cys Thr Pro Leu Arg Tyr Ser Ala Val Leu Thr Pro Met Ala Ile Gly 135 140 Lys Met Thr Leu Ala Ile Trp Gly Arg Ser Ile Gly Thr Ile Phe Pro 150 155 Ile Ile Phe Leu Leu Lys Arg Leu Ser Tyr Cys Arg Thr Asn Val Ile 170 Pro His Ser Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ala Cys Ala 180 185 190 Asp Ile Thr Val Asn Ile Trp Tyr Gly Phe Ser Val Pro Met Ala Ser 200 205 Val Leu Val Asp Val Ala Leu Ile Gly Ile Ser Tyr Thr Leu Ile Leu 220 Gln Ala Val Phe Arg Leu Pro Ser Gln Asp Ala Arg His Lys Ala Leu 230 235 Asn Thr Cys Gly Ser His Ile Gly Val Ile Leu Leu Phe Phe Ile Pro 250 Ser Phe Phe Thr Phe Leu Thr His Arg Phe Gly Lys Asn Ile Pro His 270 His Val His Ile Leu Leu Ala Asn Leu Tyr Val Leu Val Pro Pro Met 275 Leu Asn Pro Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Asp Ser 295 Met Thr Arg Met Leu Ser Val Val Trp Lys Ser 310 315

```
<211> 313
<212> PRT
<213> Mus musculus
<400> 1307
Met Ala Ile Leu Tyr Asn Ser Ser Leu Gln Lys Ala Thr Phe Phe Leu
Thr Gly Phe Gln Gly Leu Glu Glu Phe His Gly Trp Ile Ser Ile Pro
Phe Cys Ser Ile Tyr Leu Ile Val Ile Leu Gly Asn Leu Thr Ile Leu
                            40
His Val Ile Arg Thr Asp Ala Thr Leu His Glu Pro Met Tyr Tyr Phe
Leu Ala Met Leu Ala Leu Thr Asp Leu Gly Leu Cys Leu Ser Thr Leu
Pro Thr Val Leu Gly Ile Phe Trp Phe Asp Ala Arg Glu Ile Gly Ile
                                     90
Pro Ala Cys Phe Thr Gln Leu Phe Phe Ile His Thr Leu Ser Leu Val
            100
                                 105
                                                     110
Glu Ser Ser Val Leu Leu Ser Met Ser Phe Asp Arg Tyr Val Ala Ile
                            120
                                                 125
Cys Asn Pro Leu Arg Tyr Ser Thr Ile Leu Thr Pro Arg Arg Ile Val
                        135
                                             140
Lys Met Gly Leu Ser Ser Val Leu Arg Ser Ala Leu Leu Ile Leu Pro
                    150
                                         155
Leu Pro Phe Leu Leu Lys Arg Phe His Tyr Cys Arg Ser His Val Leu
                165
                                     170
                                                         175
Ala His Ala Tyr Cys Leu His Leu Glu Ile Met Lys Leu Ala Cys Ser
            180
                                185
                                                     190
Ser Ile Ile Val Asn His Ile Tyr Gly Leu Phe Val Val Ala Cys Thr
                            200
                                                 205
Val Gly Val Asp Ser Leu Leu Ile Phe Leu Ser Tyr Thr Leu Ile Leu
                        215
                                             220
His Ala Val Leu Gly Lys Ala Ser Arg Gln Glu Arg Leu Arg Ala Leu
                    230
                                         235
Asn Thr Cys Ile Ser His Ile Cys Ala Val Leu Leu Phe Tyr Ile Pro
                245
                                     250
                                                         255
Met Ile Gly Leu Ser Leu Val His Arg Phe Gly Glu His Leu Pro Arg
                                 265
                                                     270
Ile Val His Leu Leu Met Ser Tyr Val Tyr Leu Leu Val Pro Pro Leu
                            280
                                                 285
Met Asn Pro Ile Val Tyr Ser Ile Lys Thr Lys Gln Ile Arg Gln Arg
                        295
                                             300
Ile Ile Lys Lys Phe Glu Phe Ile Lys
<210> 1308
<211> 318
<212> PRT
<213> Mus musculus
<400> 1308
Met Leu Val Lys Ser Ser Ile Met Ser Val Leu Asn Ser Ser Glu Ile
                 5
                                     10
Glu Ile Thr Thr Phe Phe Leu Ile Gly Ile Pro Gly Leu Glu Tyr Ala
            20
                                25
```

```
His Ala Trp Ile Ser Ile Pro Ile Cys Leu Met Tyr Leu Val Ala Ile
Leu Gly Asn Cys Thr Ile Leu Phe Val Ile Arg Thr Glu Pro Ser Leu
His Ala Pro Met Tyr Tyr Phe Leu Ser Met Leu Ala Ile Ser Asp Leu
                    70
Gly Leu Ser Leu Ser Ser Leu Pro Thr Met Leu Arg Ile Phe Val Phe
Asn Ala Thr Gly Ile Ser Pro Asn Ala Cys Phe Ala Gln Glu Phe Phe
           100
Ile His Gly Phe Thr Asp Met Glu Ser Ser Val Leu Leu Ile Met Ser
       115
                            120
Phe Asp Arg Phe Leu Ala Ile Arg Asn Pro Leu Arg Tyr Ser Ser Ile
                        135
                                            140
Leu Thr Ser Ala Arg Val Ala Lys Met Gly Leu Val Phe Leu Ile Lys
                    150
                                        155
Ser Met Leu Leu Val Leu Pro Phe Pro Phe Thr Leu Lys Arg Leu Ala
                165
                                    170
Tyr Cys Gln Lys Ser Leu Leu Ser His Ser Tyr Cys Leu His Gln Asp
           180
                                185
Val Met Lys Leu Ala Cys Ser Asp Asn Thr Val Asn Phe Phe Tyr Gly
       195
                            200
Phe Phe Val Ala Leu Cys Met Met Ser Asp Ser Met Phe Ile Ala Val
                        215
                                            220
Ser Tyr Ile Phe Ile Leu Lys Thr Val Met Gly Ile Gly Ser His Lys
                    230
                                        235
Glu Arg Leu Lys Ala Leu Asn Thr Cys Val Ser His Ile Cys Ala Val
                                    250
                245
Leu Ile Phe Tyr Val Pro Ile Ile Ala Leu Ala Ser Met His Arg Phe
            260
                                265
Gly Lys His Lys Ser Pro Met Ala Met Ile Leu Ile Ala Asp Ile Phe
                            280
Leu Leu Val Pro Pro Leu Met Asn Pro Ile Val Tyr Cys Val Lys Thr
                        295
Arg Gln Ile Arg Glu Lys Val Leu Gly Lys Leu Gly Leu Lys
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1309

 Met
 Pro
 Thr
 Phe
 Gln
 Asn
 Thr
 Thr
 Ala
 Ser
 Ser
 Ile
 Ile
 Phe
 Leu
 Leu
 Leu
 Leu
 Ile
 Ile
 Phe
 Leu
 Leu
 Ile
 Pro
 Ile
 Pro
 Ile
 Pro
 Ile
 Pro
 Ile
 Pro
 Ile
 Ile</th

```
115
                            120
                                                 125
Ser Asn Pro Leu Arg Tyr Ala Thr Ile Leu Thr Asp Ser Arg Ile Ala
                        135
                                             140
Gln Ile Gly Val Thr Ile Val Ile Arg Gly Thr Val Met Leu Thr Pro
                    150
                                         155
Met Val Ala Leu Leu Lys Arg Leu Thr Phe Cys Ser Ser Arg Val Leu
                                     170
                                                         175
His His Ser Tyr Cys Phe His Pro Asp Val Met Lys Leu Ser Cys Thr
            180
                                185
                                                     190
Asp Thr Arg Ile Asn Asn Ala Val Gly Leu Thr Ala Met Ile Ser Thr
                            200
                                                 205
        195
Val Gly Val Asp Ser Val Leu Ile Leu Leu Ser Tyr Ile Leu Ile Ile
                        215
                                             220
Arg Thr Val Leu Ser Ile Ala Ser Pro Glu Glu Arg Lys Lys Ala Phe
                    230
                                         235
Ser Thr Cys Ile Ser His Ile Gly Ala Val Ala Ile Phe Tyr Ile Pro
                                     250
Leu Ile Ser Leu Ser Phe Val His Arg Phe Gly Lys Arg Ala Pro Pro
                                 265
                                                     270
Tyr Val His Thr Met Ile Ala Asn Thr Tyr Leu Leu Ile Pro Pro Val
                            280
Met Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Lys Ala
                        295
                                             300
Val Ile Lys Val Phe Gln Ser Lys Glu Ile
                    310
<210> 1310
<211> 318
<212> PRT
<213> Mus musculus
<400> 1310
Met Ile Pro Ser Gly Pro Phe Ile Asn Ile Ser Phe Phe Gln Pro Gln
Ser Phe Leu Met Ile Gly Ile Pro Gly Leu Glu Phe Ala His Gly Trp
                                 25
Ile Ser Ile Pro Phe Ser Phe Met Tyr Thr Val Ala Leu Thr Gly Asn
Cys Leu Ile Leu Leu Ala Val Arg Arg Thr His Ser Leu His Gln Pro
                        55
Met Tyr Tyr Phe Leu Ser Met Leu Ala Leu Ser Asp Val Gly Leu Ser
                    70
                                         75
Leu Ser Thr Leu Pro Ser Thr Leu Ala Val Leu Trp Phe Asp Tyr Arg
                                     90
                                                         95
Ser Ile Asp Phe Asn Ala Cys Leu Val Gln Met Phe Phe Leu His Ser
            100
                                 105
Phe Ser Val Val Glu Ser Ser Val Leu Leu Ala Met Ser Phe Asp Arg
                            120
Phe Val Ala Ile Ser Asn Pro Leu Arg Tyr Ala Ser Val Leu Thr Asn
                        135
                                             140
Asn Val Ile Ile Arg Ile Gly Val Ala Ile Val Ala Arg Ala Thr Leu
                    150
                                         155
```

Ser Leu Phe Pro Val Pro Phe Leu Leu Lys Arg Leu Asn Tyr Cys Pro

Gly Lys Ile Leu Leu Ser His Ser Phe Cys Phe His Ala Asp Val Met 185

Lys Leu Ala Cys Ala Asp Ile Thr Val Asn Ile Leu Tyr Gly Leu Tyr 200

170

175

190

```
Val Val Leu Ser Thr Val Gly Val Asp Ser Leu Leu Ile Val Met Ser
                        215
Tyr Ser Leu Ile Leu His Thr Val Met Gly Leu Ala Ser Pro Arg Glu
                    230
                                        235
Arg Val Arg Thr Leu Asn Thr Cys Val Ser His Ile Leu Ala Val Leu
Val Phe Tyr Ile Pro Val Ile Gly Val Ser Met Ile His Arg Phe Gly
                                265
Lys His Leu Pro His Ile Val His Ala Leu Val Ala Tyr Val Tyr Leu
                            280
                                                 285
Val Val Pro Pro Val Leu Asn Pro Ile Ile Tyr Ser Val Lys Ser Lys
                        295
Pro Ile Arg Gly Ala Met Phe Lys Val Leu Arg Gly Lys Asp
                    310
<210> 1311
<211> 317
<212> PRT
<213> Mus musculus
<400> 1311
Met His Thr Gly Met Ser Ile Phe Asn Leu Ser Val Thr Glu Val Ser
Thr Phe His Leu Val Gly Phe Pro Gly Met Glu Ser Ala His Ile Trp
                                25
Ile Phe Ile Pro Ile Cys Leu Leu Tyr Thr Val Ala Ile Leu Gly Asn
Cys Thr Ile Leu Phe Phe Ile Lys Ser Glu Pro Ser Leu His Glu Pro
Met Tyr Tyr Phe Leu Ser Met Leu Ala Leu Ser Asp Leu Gly Leu Ser
Ile Ser Ser Leu Pro Thr Met Leu Lys Val Phe Leu Phe Asn Ser Pro
Asp Ile Ser Pro Asn Glu Cys Phe Ala Gln Glu Phe Phe Ile His Glu
                                105
                                                    110
Phe Ser Ala Met Glu Ser Ser Val Leu Leu Ile Met Ser Phe Asp Arg
                            120
                                                125
Tyr Ile Ala Ile Cys Asn Pro Leu Arg Tyr Thr Ser Ile Leu Thr Ser
                        135
                                            140
Ala Arg Val Leu Gln Ile Gly Leu Ala Phe Ser Leu Lys Asn Val Leu
                    150
                                        155
Leu Ile Leu Pro Phe Pro Val Thr Leu Val Arg Leu Arg Tyr Cys Lys
                165
                                    170
                                                         175
Lys Asn Leu Leu Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys
```

Ala Leu Thr Gly Ile Leu Asp Ile Thr Phe Ile Phe Met Ser Tyr Ala 210

Leu Ile Leu Arg Ala Val Leu Gly Ile Ala Ser Gln Arg Glu Arg Leu 225

Lys Val Leu Ser Thr Cys Val Ser His Ile Cys Ala Val Leu Ile Phe 245

Tyr Val Pro Val Ile Ser Leu Ala Val Ile Tyr Arg Leu Ala Ser Arg 260

Ser Ser Pro Ile Ser Lys Ile Leu Met Ala Asp Ile Phe Leu Leu Val 275

Pro Pro Val Met Asn Pro Ile Ile Tyr Cys Val Lys Ser Gln Gln Ile

185

Leu Ala Cys Ser Asp Asn Lys Phe Asn Val Ile Tyr Gly Leu Phe Val

200

190

1

```
Arg Asn Val Ile Leu Glu Lys Leu Cys Gln Lys Gln Ser
                    310
<210> 1312
<211> 312
<212> PRT
<213> Mus musculus
<400> 1312
Met Ile Leu Asn Thr Ser Glu Val Glu Ile Ser Ser Phe Leu Leu Ile
                5
                                   10
Gly Ile Pro Gly Phe Glu His Met His Ile Trp Ile Ser Ile Pro Ile
                                25
           20
Cys Leu Met Tyr Leu Thr Ala Ile Leu Gly Asn Cys Thr Ile Leu Cys
                           40
Val Ile Arg Thr Glu Pro Ser Leu His Glu Pro Met Tyr Tyr Phe Leu
                       55
Ser Met Leu Ala Phe Ser Asp Leu Gly Leu Ser Phe Ser Ser Ile Pro
                   70
                                       75
Thr Met Leu Arg Ile Phe Leu Phe Asn Ala Met Gly Ile Ser Thr Asp
               85
                                   90
Ala Cys Ile Ala Gln Glu Phe Phe Ile His Gly Phe Thr Asp Met Glu
           100
                               105
                                                   110
Ser Ser Val Leu Ile Met Ser Phe Asp Arg Phe Val Ala Ile Arg
                           120
       115
His Pro Leu Arg Tyr Ser Ala Ile Leu Thr Ser Ser Arg Val Val Gln
                       135
                                           140
Ile Gly Leu Ala Phe Ser Val Lys Ser Ile Leu Leu Val Leu Pro Leu
                150
                                       155
Pro Phe Thr Leu Lys Arg Leu Arg Tyr Cys Asn Lys Arg Leu Leu Ser
                                   170
             165
His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ser Asp
           180
                               185
                                                190
Asn Arg Val Asn Phe Tyr Tyr Gly Leu Phe Val Ala Leu Cys Met Met
                           200
Ser Asp Ser Val Phe Ile Ala Val Ser Tyr Val Phe Ile Leu Lys Thr
                       215
                                           220
Val Leu Gly Ile Ala Ser His Gly Glu Arg Leu Lys Ala Leu Asn Thr
                   230
                                       235
Cys Val Ser His Ile Cys Ala Val Leu Ile Phe Tyr Val Pro Ile Ile
               245
                                   250
Thr Leu Ala Thr Met His Arg Phe Ala Lys His Lys Ser Pro Leu Ala
           260
                               265
Met Ile Leu Ile Ala Asp Ala Phe Leu Leu Val Pro Pro Leu Met Asn
                           280
Pro Ile Val Tyr Cys Val Lys Thr Arg Gln Ile Arg Val Lys Val Leu
                       295
Glu Lys Leu Gly Leu His Ser Lys
                    310
<210> 1313
<211> 312
<212> PRT
<213> Mus musculus
```

<400> 1313

```
Met Thr Pro Gly Pro Leu Gly Asn Gly Ser Met Ser Ser Thr Phe Leu
                                    10
Leu Ser Gly Ile Pro Gly Leu Glu His Met His Ile Trp Ile Ser Leu
Pro Leu Cys Leu Met Tyr Leu Val Ser Ile Leu Gly Asn Cys Thr Ile
Leu Phe Ile Ile Lys Thr Glu Pro Ser Leu His Glu Pro Met Tyr Leu
                        55
Phe Leu Ser Met Leu Ala Leu Thr Asp Leu Gly Leu Ser Leu Cys Thr
                                        75
Leu Pro Thr Val Leu Gly Ile Phe Trp Val Gly Ala Arg Asp Ile Ser
                                    90
His Asp Ala Cys Phe Thr Gln Leu Phe Phe Ile His Cys Leu Ser Phe
            100
                                105
Leu Glu Ser Ser Val Leu Leu Ser Met Ala Phe Asp Arg Phe Val Ala
                            120
Ile Cys Arg Pro Leu His Tyr Ala Ser Ile Leu Thr His Thr Val Ile
   130
                        135
Val Arg Ile Gly Leu Ala Ser Leu Gly Arg Ser Val Ala Leu Ile Phe
                    150
Pro Leu Pro Phe Met Leu Lys Arg Phe Pro Tyr Cys Gly Ser Leu Val
                                    170
Leu Ser His Ser Tyr Cys Leu His Gln Glu Val Met Lys Leu Ala Cys
                                185
                                                    190
Ala Asp Ile Lys Ala Asn Ser Ile Tyr Gly Met Phe Val Ile Val Ser
                            200
Thr Val Gly Val Asp Ser Leu Leu Ile Leu Phe Ser Tyr Ala Leu Ile
                        215
Leu Arg Thr Val Leu Ser Ile Ala Ser Arg Ala Glu Arg Leu Lys Ala
                    230
Leu Asn Thr Cys Val Ser His Ile Ser Ala Val Leu Leu Phe Tyr Thr
                                    250
Pro Met Ile Gly Leu Ser Val Ile His Arg Phe Gly Lys Gln Ala Pro
                                265
His Leu Val Gln Val Val Met Gly Phe Val Tyr Leu Leu Phe Pro Pro
                            280
Val Met Asn Pro Ile Val Tyr Ser Val Lys Thr Lys Gln Ile Arg Asp
                        295
Arg Val Ala His Ala Phe Cys Asn
305
```

```
<210> 1314
<211> 311
```

<400> 1314

```
      Met Ser Asn Val Thr Leu Val Thr Thr Phe Phe Leu Ser Gly Ile Pro 1
      5
      10
      15

      His Pro Pro Ala Leu Asp Thr Met Leu Phe Val Ala Phe Leu Val Ile 20
      25
      30

      Tyr Ile Leu Thr Val Leu Gly Asn Phe Leu Ile Leu Met Val Ile Arg 35
      40
      45

      Val Asp Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Thr Asn Leu 50
      55
      60

      Ser Phe Ile Asp Met Trp Phe Ser Thr Val Thr Val Pro Lys Met Leu 65
      70
      75
      80

      Met Thr Leu Val Ser Pro Arg Gly Gly Ala Ile Ser Phe His Ser Cys
```

<212> PRT

<213> Mus musculus

```
90
Val Ala Gln Leu Tyr Cys Phe His Phe Leu Gly Ser Thr Glu Cys Phe
                                105
Leu Tyr Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala Ile Ser Tyr Pro
                            120
Leu Arg Tyr Ser Ser Met Met Ser Gly Arg Val Cys Ala Leu Leu Ala
                        135
                                            140
Ala Gly Thr Trp Ile Thr Gly Ser Leu His Ser Ala Val Gln Thr Thr
                    150
                                        155
Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro Asn Gln Ile Gln His Tyr
                                    170
Phe Cys Asp Ala Pro Pro Ile Leu Lys Leu Ala Cys Ala Asp Thr Ser
                                185
                                                     190
Ala Asn Glu Met Val Ile Phe Val Asn Ile Gly Val Val Ala Ser Gly
Cys Phe Leu Leu Ile Ser Leu Ser Tyr Val Ser Ile Val Cys Ser Ile
                        215
Leu Arg Ile Arg Thr Ser Glu Gly Arg His Arg Ala Phe Gln Thr Cys
                    230
                                        235
Ala Ser His Cys Ile Val Val Leu Cys Phe Phe Val Pro Cys Val Phe
                                    250
Ile Tyr Leu Arg Pro Gly Ser Arg Asp Ala Val Asp Gly Val Val Ala
                                265
Val Phe Tyr Thr Val Leu Thr Pro Leu Leu Asn Pro Val Val Tyr Thr
                            280
Leu Arg Asn Lys Glu Val Lys Lys Ala Leu Val Lys Leu Lys Asp Lys
Val Ala Tyr Ser Gln Ser Gln
<210> 1315
<211> 310
```

<212> PRT

<213> Mus musculus

<400> 1315

Met Ser Pro Gly Asn His Ser Glu Ala Ser Leu Phe Val Leu Glu Gly 10 Leu Thr Asp Gln Pro Gly Leu Gln Ile Pro Leu Phe Ser Leu Phe Leu Leu Ile Tyr Leu Val Ser Met Ala Gly Asn Leu Gly Leu Val Phe Leu 35 40 Ile Arg Ile Ser Ser Gln Leu His Thr Pro Met Tyr His Phe Leu Ser 55 60 Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Ile Pro Lys 7.0 75 Met Leu Val Asn Phe Val Ser Glu Lys Asn Phe Thr Ala Phe Pro Glu 90 Cys Met Val Gln Leu Phe Leu Phe Ser Phe Phe Gly Ile Asp Asp Ser 100 105 110 Tyr Met Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Asn Val Thr Met Ser His Arg Val Cys Met Leu Leu 135 140 Ser Thr Ala Val Tyr Ala Met Gly Ala Phe Gly Ala Thr Val His Thr 155 Ser Tyr Ile Ser Ser Arg Ser Phe Cys Gly Thr Asn Val Ile His His 170

```
Tyr Phe Cys Asp Ile Leu Pro Leu Ile Asn Ile Ala Cys Ser Arg Asp
            180
                                185
Tyr Thr Lys Glu Phe Trp Val Met Ile Leu Val Gly Phe Asn Val Phe
                            200
        195
Ala Ser Val Phe Ser Ile Phe Ile Ser Tyr Ala Phe Ile Leu Ala Ser
                        215
Ile Leu Arg Ile Arg Ser Ala Asp Gly Arg Ser Lys Ala Phe Ser Thr
Cys Ser Ser His Leu Ala Ala Val Gly Val Phe Tyr Gly Ser Ile Ile
                                    250
Phe Met Tyr Phe Lys Pro Ser Thr Gly Asn Thr Thr Gln Glu Lys Val
                                265
Ala Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu Ile
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ile Lys Lys Ala Leu
                        295
Asn Ser Gly Leu Phe Ser
<210> 1316
<211> 310
<212> PRT
<213> Mus musculus
<400> 1316
Met Leu Asn Gly Ser Val Val Thr Thr Phe Phe Leu Ser Gly Leu Pro
                                    10
His Pro Pro Val Leu Asp Ser Met Leu Phe Gly Ile Phe Leu Val Ile
                                25
```

Tyr Ile Leu Thr Val Leu Gly Asn Leu Leu Ile Leu Met Val Ile Arg 40 Val Asp Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Thr Asn Leu 55 Ser Phe Ile Asp Met Trp Phe Ser Thr Val Thr Val Pro Lys Met Leu 70 75 Met Thr Leu Val Ser Thr Gly Gly Gly Ala Ile Ser Phe His Ser Cys 90 85 Val Ala Gln Leu Tyr Cys Phe His Phe Leu Gly Ser Thr Glu Cys Phe 105 100 Leu Tyr Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala Ile Ser Tyr Pro 115 120 125 Leu Arg Tyr Ser Ser Met Met Ser Gly Arg Val Cys Ala Leu Leu Ala 135 140 Ala Gly Thr Trp Ile Thr Gly Ser Leu His Ser Ala Val Gln Thr Thr 150 155 Leu Ile Phe His Leu Pro Tyr Cys Gly Pro Asn Glu Ile Gln His Tyr 165 170 Phe Cys Asp Gly Pro Pro Ile Leu Lys Leu Ala Cys Ala Asp Thr Ser 180 185 190 Ala Ile Glu Met Val Ile Phe Val Asn Ile Gly Val Val Ala Ser Gly 200 Cys Phe Phe Leu Ile Ser Leu Ser Tyr Val Ser Ile Val Cys Ser Ile 215 220 Leu Arg Ile Arg Thr Ser Glu Gly Arg His Arg Ala Phe Gln Thr Cys 230 235 Ala Ser His Cys Ile Val Val Leu Cys Phe Phe Val Pro Cys Val Phe 250 Ile Tyr Leu Arg Pro Gly Ser Arg Asp Ala Val Asp Gly Val Val Thr

```
260
                                265
Val Phe Tyr Thr Val Leu Thr Pro Leu Leu Asn Pro Val Val Tyr Thr
        275
                            280
Leu Arg Asn Lys Glu Val Lys Lys Ala Leu Phe Lys Leu Lys Asp Lys
    290
                        295
                                             300
Val Ala Phe Ser Gln Arg
<210> 1317
<211> 311
<212> PRT
<213> Mus musculus
<400> 1317
Met Ser Asn Thr Ser Ile Val Thr Thr Phe Phe Leu Ser Gly Leu Pro
                                    10
His Pro Pro Val Leu Asp Ser Met Leu Phe Gly Ile Phe Leu Val Ile
Tyr Ile Leu Thr Val Leu Gly Asn Leu Leu Ile Leu Thr Val Ile Arg
Val Asp Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Thr Asn Leu
Ser Phe Ile Asp Met Trp Phe Ser Thr Val Thr Val Pro Lys Met Leu
                    70
Met Thr Leu Val Ser Thr Gly Gly Gly Ala Ile Ser Phe His Ser Cys
                                    90
Val Ala Gln Leu Tyr Cys Phe His Phe Leu Gly Ser Thr Glu Cys Phe
                                105
Leu Tyr Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala Ile Ser Tyr Pro
                            120
                                                 125
Leu Arg Tyr Ser Ser Met Met Gly Gly Arg Met Cys Ala Leu Leu Ala
                        135
                                            140
Ala Gly Thr Trp Leu Thr Gly Ser Leu His Ser Ala Val Gln Thr Thr
                    150
                                        155
Leu Thr Phe His Leu Pro Tyr Cys Gly Pro Asn Gln Ile Gln His Tyr
                                    170
Phe Cys Asp Ala Pro Pro Ile Leu Lys Leu Ala Cys Ala Asp Thr Ser
                                185
                                                     190
Ala Asn Glu Met Val Ile Phe Val Asn Ile Gly Val Val Ala Ser Gly
        195
                            200
Cys Phe Phe Leu Ile Ser Leu Ser Tyr Val Ser Ile Val Cys Ser Ile
                        215
                                             220
Leu Arg Ile Arg Thr Ser Glu Gly Arg His Arg Ala Phe Gln Thr Cys
                    230
                                        235
Ala Ser His Cys Ile Val Val Leu Cys Phe Phe Gly Pro Gly Leu Phe
                                    250
Ile Tyr Leu Arg Pro Gly Ser Arg Asp Ala Val Asp Gly Ile Val Ala
                                265
Val Phe Tyr Thr Val Leu Thr Pro Leu Leu Asn Pro Val Val Tyr Thr
        275
                            280
Leu Arg Asn Lys Glu Val Lys Lys Ala Leu Leu Lys Ile Lys Tyr Gly
    290
                        295
Ser Val Leu Pro Gln Asp Lys
```

Val Val Lys Val Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Phe Leu

```
Cys Ile Leu Ala Leu Thr Asp Val Ser Leu Ser Met Ser Thr Leu Pro
                    70
                                        75
Ser Met Leu Ser Ile Phe Trp Phe Asn Ala Pro Glu Ile Pro Phe Asp
                                    90
Ala Cys Ile Thr Gln Met Phe Phe Ile His Gly Phe Gly Val Val Glu
                                105
                                                     110
Ser Gly Val Leu Val Ser Met Ala Phe Asp Arg Phe Val Ala Ile Arg
                            120
Asp Pro Leu Arg Tyr Ala Ser Ile Leu Thr His Gly Leu Ile Gly Lys
                        135
Ile Gly Leu Val Val Leu Ala Arg Ala Val Cys Val Val Phe Pro Val
                    150
                                        155
Pro Phe Leu Ile Lys Arg Leu Pro Phe Cys Arg Ser Asn Val Leu Ser
                165
                                    170
His Ser Tyr Cys Leu His Gln Asp Ala Met Arg Leu Ala Cys Ala Ser
            180
                                185
                                                     190
Thr Arg Val Asn Ser Leu Tyr Gly Leu Ile Val Val Ile Leu Thr Leu
                            200
Gly Leu Asp Ala Leu Ile Ile Leu Phe Ser Tyr Val Leu Ile Leu Lys
                        215
Thr Val Leu Gly Ile Ala Ser Arg Ala Glu Arg Leu Lys Ala Leu Asn
                    230
                                        235
Thr Cys Leu Ser His Ile Cys Ala Val Leu Leu Phe Tyr Ile Pro Leu
                245
                                    250
Ile Gly Ala Thr Met Ile His Arg Phe Gly Lys His Leu Ser Pro Val
            260
                                265
                                                     270
Val His Met Phe Met Ala Asn Ile Tyr Leu Leu Pro Pro Val Leu
        275
                            280
Asn Pro Ile Val Tyr Ser Val Lys Thr Lys Gln Ile Arg Arg Ile
                        295
Ile Gln Val Phe Arg Gly Arg Lys Asn Met Ser
                    310
<210> 1320
<211> 317
<212> PRT
<213> Mus musculus
<400> 1320
Met Leu Val Asn Asn Ile Thr Ser Thr His Pro Val Ala Phe Leu Leu
                                    10
Met Gly Ile Pro Gly Leu Glu His Leu His Ile Trp Ile Ser Ile Pro
                                25
Phe Cys Ser Ala Tyr Thr Leu Ala Val Leu Gly Asn Cys Thr Leu Leu
                            40
                                                45
Phe Ile Ile Arg Val Asp Ala Ala Leu His Glu Thr Met Tyr Leu Phe
                        55
Leu Ala Met Leu Ala Ala Ile Asp Leu Val Leu Ser Ser Ser Thr Leu
                                        75
Pro Lys Met Leu Ser Leu Phe Trp Phe Arg Asp Arg Glu Ile Asn Phe
                                    90
His Ala Cys Leu Ile Gln Met Phe Phe Leu His Ser Phe Ala Ile Met
                                105
                                                    110
Glu Ser Ala Met Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
                                                125
```

115 120 125 Cys Lys Pro Leu His Tyr Thr Thr Ile Leu Thr Lys Pro Leu Ile Ile

140

```
Lys Ile Gly Leu Ala Ala Val Thr Arg Ala Val Thr Leu Met Thr Pro
                    150
Leu Pro Phe Leu Leu Arg Arg Phe His Tyr Cys Arg Gly Thr Val Ile
                165
                                    170
Ala His Cys Tyr Cys Glu His Met Ala Val Val Arg Leu Ala Cys Gly
                                185
Asp Thr Arg Phe Asn Asn Ile Tyr Gly Ile Ala Val Ala Met Phe Ile
                            200
        195
Val Val Leu Asp Leu Leu Phe Val Ile Leu Ser Tyr Ile Phe Ile Leu
                        215
                                            220
Arg Ala Val Leu Gln Leu Ala Ser Gln Glu Ala Arg Tyr Lys Ala Phe
                    230
Gly Thr Cys Val Ser His Ile Gly Ala Ile Leu Ala Phe Tyr Thr Pro
                245
                                    250
Val Val Ile Ser Ser Val Met His Arg Val Ala Arg Arg Ala Ala Pro
                                265
His Val His Ile Leu Leu Ala Asn Phe Tyr Leu Leu Phe Pro Pro Met
Val Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Arg
                        295
Val Leu Gly Leu Phe Leu Arg Lys Asp Leu Lys Gly Glu
                    310
```

<210> 1321 <211> 316

<212> PRT

<213> Mus musculus

<400> 1321

Met Ala Pro Phe Asn Tyr Thr Gly Thr Ser His Ser Val Phe Ile Leu Leu Gly Ile Pro Gly Leu Glu Glu Gln His Leu Trp Ile Ser Leu Pro 25 Phe Phe Ile Ser Tyr Leu Val Ala Leu Phe Gly Asn Ile Thr Leu Ile Leu Val Ile Ile Ala Glu Arg Ser Leu His Glu Pro Met Tyr Leu Phe 55 Leu Cys Met Leu Ala Ala Ala Asp Leu Ile Leu Ser Thr Thr Thr Val Pro Lys Ala Leu Ala Ile Phe Trp Phe Arg Ala Gly Ala Ile Ser Leu 90 Asp Gly Cys Val Thr Gln Ile Phe Phe Ile His Ala Thr Phe Ile Ala 105 Glu Ser Gly Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 120 125 Cys Asp Pro Leu His Tyr Ser Thr Val Leu Ser His Val Ile Ile Val 135 140 Arg Ile Gly Leu Ala Val Val Leu Arg Ser Phe Cys Val Ile Leu Pro 155 150 Asp Val Phe Leu Val Lys Arg Leu Pro Phe Cys Arg Ser Asn Val Leu 170 Pro His Thr Tyr Cys Glu His Met Ala Val Ala Arg Phe Ala Cys Ala 180 185 190 Asp Ile Arg Val Asn Val Trp Tyr Gly Leu Ser Val Leu Leu Ser Thr 200 205 Val Val Leu Asp Ala Leu Leu Ile Leu Val Ser Tyr Gly Leu Ile Leu 215 His Thr Val Phe Arg Leú Pro Ser Arg Gly Ala Arg Gln Lys Ala Leu

```
230
                                        235
Gly Thr Cys Gly Ser His Leu Gly Val Ile Ser Met Phe Tyr Leu Pro
                245
                                    250
Gly Ile Phe Thr Ile Ile Thr Gln Arg Phe Gly Gln His Val Pro Leu
                                265
                                                    270
            260
His Thr His Ile Leu Leu Ala Asn Val Cys Met Leu Ala Pro Pro Met
                            280
Leu Asn Pro Ile Ile Tyr Gly Ile Lys Thr Arg Gln Ile Arg Glu Arg
                        295
                                            300
Val Leu Ser Ser Leu Ser Ser Gln Trp Lys Leu Arg
                    310
<210> 1322
<211> 317
<212> PRT
<213> Mus musculus
<400> 1322
Met Ser Asp Val Asn Thr Thr Ser Asn Trp Pro Thr Phe Ser Phe Ile
                                    10
Gly Ile Pro Gly Leu Glu Ala Ala His Met Trp Ile Ser Ile Pro Phe
            20
                                25
Cys Leu Leu Tyr Leu Val Ala Leu Gly Gly Asn Val Leu Leu Leu
Leu Val Arg Ala Glu Gln Asn Leu His Glu Pro Gln Phe Tyr Phe Leu
                        55
Ala Met Leu Ala Leu Thr Asp Leu Gly Leu Ser Leu Ser Thr Met Pro
                    70
                                        75
Ser Val Leu Ala Ile Phe Trp Phe Asp Val His Asn Val Gly Leu Asp
                85
                                    90
Ala Cys Leu Thr Gln Met Phe Phe Ile His Thr Leu Ser Ser Val Glu
            100
                                105
Ser Gly Val Leu Val Ala Met Ala Phe Asp Arg Leu Val Ala Ile Cys
                            120
Ala Pro Leu Thr Tyr Thr Arq Ile Leu Asn His Gln Thr Val Leu Cys
                        135
Leu Ser Gly Ala Ala Leu Ile Arg Gly Ala Thr Leu Leu Ala Pro Leu
                    150
Pro Phe Phe Leu Arg Thr Phe Pro Phe Cys Gly Ala Asn Ile Leu Ser
                165
                                    170
His Ser Tyr Cys Tyr Tyr Pro Asp Met Leu Asn Leu Ala Cys Gly Asp
            180
                                185
                                                    190
Val Thr Phe Ser Ser Val Tyr Gly Leu Val Cys Val Leu Cys Thr Phe
        195
                            200
Ala Val Asp Val Ile Phe Ile Leu Val Ser Tyr Met Lys Ile Leu Gly
                        215
Thr Val Met Lys Leu Gly Ile Gln Asp Arg Asn Trp Lys Ser Leu Gln
                    230
                                        235
Thr Cys Val Cys His Leu Cys Thr Val Leu Val Phe Tyr Leu Pro Leu
                245
                                    250
                                                         255
Ile Ser Leu Ala Val Leu His Arg Tyr Thr Gln Glu Thr Ser Pro Ile
           260
                                265
                                                    270
Leu Tyr Thr Thr Met Ser Asn Ala Tyr Leu Leu Met Thr Pro Leu Leu
       275
                            280
                                                285
Asn Pro Leu Val Tyr Ser Leu Lys Ser Arg Gln Ile Gln Ala Ala Leu
                        295
                                            300
Arg Lys Arg Phe Gly Val Gln Arg Val Val Ala Gly Glu
                    310
```

```
<210> 1323
<211> 317
<212> PRT
<213> Mus musculus
<400> 1323
Met Glu Ile Thr Asn Ser Ser Trp Phe Gln Pro Pro Thr Leu Leu Leu
Thr Gly Ile Pro Gly Leu Glu Asp Val Gln Ile Trp Phe Cys Ile Pro
            20
                                 25
Leu Cys Val Met Tyr Leu Ile Ala Leu Leu Gly Asn Cys Thr Ile Leu
                            40
Phe Val Ile Arg Thr Thr Ser Ser Leu His Glu Pro Gln Tyr Ile Phe
                        55
Leu Ser Met Leu Ala Ala Thr Asp Val Gly Leu Ser Val Ser Thr Leu
                    70
                                         75
Pro Thr Val Leu Asn Val Phe Leu Leu Asn His Arg Asp Ile Glu Phe
                                     90
His Ser Cys Leu Thr Gln Met Phe Phe Ile His Thr Phe Ser Ser Met
                                 105
Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile
                            120
                                                 125
Arg Asn Ser Leu His Tyr Thr Ala Val Leu Thr Pro Thr Arg Ile Ile
                        135
                                             140
Lys Ile Gly Leu Ala Ala Val Val Arg Gly Val Met Leu Met Ile Pro
                    150
                                         155
Leu Pro Ile Leu Leu Lys Arg Leu Pro Phe Cys Lys Gly Val Ile Leu
                165
                                     170
Ser His Cys Tyr Cys Tyr His Pro Asp Ile Met Lys Leu Ala Cys Gly
            180
                                 185
                                                     190
Pro Val Arg Val Asn Ile Ile Tyr Gly Leu Ser Leu Val Leu Cys Ser
                            200
Phe Gly Val Asp Ser Val Phe Ile Val Ile Ser Tyr Ile Leu Ile Leu
                        215
    210
Lys Thr Val Leu Gly Ile Ala Ser Gly Asp Gly Lys Leu Lys Ala Leu
                                         235
                    230
Asn Thr Cys Val Ser His Ile Phe Thr Val Phe Ile Phe Tyr Val Pro
                245
                                     250
Leu Ile Val Leu Ala Leu Ile His Arg Phe Gly Thr Phe Ala Ser Pro
                                 265
Leu Leu His Val Thr Met Ala Asn Leu Phe Leu Phe Leu Thr Pro Val
                            280
Leu Asn Pro Leu Val Tyr Ser Leu Lys Thr Lys Gln Ile Arg Ser Ala
Val Cys Lys Ile Phe Lys Val Trp Gly Asn Leu Leu Lys
                    310
<210> 1324
<211> 319
<212> PRT
<213> Mus musculus
<400> 1324
Met Ala Thr Ser Asn Ser Ser Thr Ile Val Ser Ser Thr Phe Tyr Leu
                                     10
```

Thr Gly Ile Pro Gly Tyr Glu Glu Phe His His Trp Ile Ser Ile Pro

```
Phe Cys Phe Leu Tyr Leu Val Gly Ile Thr Gly Asn Cys Met Ile Leu
                            40
His Ile Val Arg Thr Asp Pro Arg Leu His Glu Pro Met Tyr Tyr Phe
Leu Ala Met Leu Ser Leu Thr Asp Met Ala Met Ser Leu Pro Thr Met
                    70
Met Ser Leu Phe Arg Val Leu Trp Ser Ile Ser Arg Glu Ile Gln Phe
                85
                                    90
Asn Ile Cys Val Val Gln Met Phe Leu Ile His Thr Phe Ser Phe Thr
                                105
Glu Ser Ser Val Leu Leu Ala Met Ala Leu Asp Arg Tyr Val Ala Ile
                            120
                                                 125
Cys His Pro Leu Arg Tyr Ala Thr Ile Leu Thr Pro Lys Leu Ile Ala
                        135
                                             140
Lys Ile Gly Thr Ala Ala Leu Leu Arg Ser Ser Ile Leu Ile Ile Pro
                    150
                                         155
Leu Ile Ala Arg Leu Ala Phe Phe Pro Phe Cys Gly Ser His Val Leu
                165
                                    170
Ser His Ser Tyr Cys Leu His Gln Asp Met Ile Arg Leu Ala Cys Ala
            180
                                185
Asp Ile Arg Phe Asn Val Ile Tyr Gly Leu Val Leu Ile Thr Leu Leu
                            200
       195
Trp Gly Met Asp Ser Leu Gly Ile Phe Val Ser Tyr Val Leu Ile Leu
                        215
                                            220
His Ser Val Leu Lys Ile Ala Ser Arg Glu Gly Arg Leu Lys Ala Leu
                    230
                                         235
Asn Thr Cys Ala Ser His Ile Cys Ala Val Leu Ile Leu Tyr Val Pro
                245
                                    250
Met Ile Gly Leu Ser Ile Val His Arg Phe Ala Lys His Ser Ser Pro
                                                     270
            260
                                265
Leu Ile His Ile Phe Met Ala His Ile Tyr Leu Leu Val Pro Pro Val
                            280
Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Glu Gly
                        295
Ile Leu His Leu Leu Cys Ser Pro Lys Ile Ser Ser Ile Thr Met
                    310
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1325

Met Pro His Leu Asn Ser Thr Ile Phe Arg Pro Ser Val Leu Thr Leu 10 Thr Gly Ile Pro Gly Leu Glu Ser Val Gln Phe Trp Ile Gly Ile Pro Phe Cys Ile Met Tyr Ile Ile Ala Leu Leu Gly Asn Ser Leu Leu Leu Val Val Ile Lys Val Glu Arg Ser Leu His Glu Pro Met Tyr Leu Phe 55 Leu Ala Met Leu Gly Ala Thr Asp Ile Ser Leu Ser Thr Ser Ile Leu 70 Pro Lys Met Leu Gly Ile Phe Trp Phe His Leu Ser Thr Ile Tyr Phe 85 90 95 Asp Ala Cys Leu Leu Gln Met Trp Leu Ile His Thr Phe Gln Gly Ile 100 105 110

```
Glu Ser Gly Ile Leu Phe Ala Met Ala Met Asp Arg Tyr Val Ala Ile
        115
                            120
Cys Asp Pro Leu Arg His Ala Ser Ile Phe Thr Gln Arg Leu Leu Thr
    130
                        135
Gln Ile Gly Val Gly Val Thr Leu Arg Ala Ala Leu Phe Val Ala Pro
                                        155
Cys Leu Phe Leu Ile Lys Cys Arg Leu Lys Phe Tyr Trp Thr Thr Val
                                    170
Val Ser His Ser Tyr Cys Glu His Met Ala Ile Val Lys Leu Ala Ala
                                185
                                                    190
Glu Asp Val His Val Asn Lys Ile Tyr Gly Leu Phe Val Ala Phe Ser
                            200
Ile Leu Gly Leu Asp Ile Ile Phe Ile Thr Leu Ser Tyr Ile Arg Ile
                        215
Phe Ile Thr Val Phe Lys Leu Pro Gln Lys Glu Ala Arg Leu Lys Ala
                    230
Phe Asn Thr Cys Val Ala His Ile Cys Val Phe Leu Glu Phe Tyr Leu
                                    250
Leu Ala Phe Phe Ser Phe Phe Thr His Arg Phe Gly Tyr His Val Pro
                                265
Ser Tyr Ile His Ile Leu Leu Ser Asn Leu Tyr Leu Leu Val Pro Pro
       275
                            280
Leu Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Asp
                        295
Gln Val Ser Lys Ile Leu Tyr Cys Asn Tyr Ser Tyr
                    310
```

<211> 318

<212> PRT

<213> Mus musculus

<400> 1326

Met Ser Gly Ala Asn Ser Ser Ser Leu Thr Pro Glu Phe Phe Ile Leu Asn Gly Val Pro Gly Leu Glu Asp Ala His Val Trp Ile Ser Leu Pro 25 Phe Cys Phe Met Tyr Met Ile Ala Val Val Gly Asn Cys Gly Leu Ile Tyr Leu Ile Gly His Glu Glu Ala Leu His Arg Pro Met Tyr Tyr Phe Leu Ala Leu Leu Ser Phe Thr Asp Val Thr Leu Cys Thr Thr Thr Val 70 75 Pro Asn Met Leu Cys Ile Phe Trp Phe Asn Phe Lys Lys Ile Gly Phe Asn Ser Cys Leu Val Gln Met Phe Phe Val His Met Leu Thr Gly Met 105 110 Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile 115 120 125 Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asn Pro Val Ile Ala 130 135 140 Lys Ala Gly Leu Ala Thr Phe Leu Arg Ser Val Met Leu Ile Phe Pro 150 Phe Thr Leu Leu Thr Lys Arg Leu Pro Tyr Cys Arg Gly Ser Leu Ile 165 170 Pro His Thr Tyr Cys Asp His Met Ser Val Ala Lys Val Ser Cys Gly 180 185 Asn Ala Lys Val Asn Ala Ile Tyr Gly Leu Met Val Ala Leu Leu Ile

```
195
                           200
Gly Val Phe Asp Ile Cys Cys Ile Ser Val Ser Tyr Thr Met Ile Leu
                       215
                                           220
Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe
                   230
                                       235
Ser Thr Cys Thr Ser His Ile Cys Ala Ile Val Ile Thr Tyr Val Pro
               245
                                   250
Ala Phe Phe Thr Phe Phe Thr His Arg Phe Gly Gly His Thr Ile Pro
                               265
His His Val His Ile Ile Val Ala Asn Leu Tyr Leu Leu Pro Pro
                           280
Thr Met Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu
                       295
                                           300
Ser Val Ile Lys Phe Leu Leu Gly Asp Lys Met Gly Ile Thr
                   310
<210> 1327
<211> 317
<212> PRT
<213> Mus musculus
<400> 1327
Met Pro Asn Ile Asn Leu Leu Gln Asn Ala Pro Ser Asn Ile Thr Glu
               5
                                   10
Ala His Pro Leu Ser Phe Leu Leu Gly Ile Pro Gly Leu Glu Ala
           2.0
                               25
Thr Gln Phe Trp Leu Gly Phe Pro Phe Cys Val Val Tyr Leu Thr Ala
                           40
Leu Val Gly Asn Leu Ile Ile Leu Phe Val Ile Trp Thr Asp Arg Thr
                       55
Phe His Gln Pro Met Phe Tyr Phe Leu Ala Met Leu Ser Val Ile Asp
                   70
                                       75
Leu Ser Leu Ser Thr Ala Thr Ile Pro Lys Met Leu Gly Ile Phe Trp
              85
                                  90
Phe Ser Leu Gln Glu Leu Cys Phe Ala Cys Cys Val Ala Gln Val Phe
          100
                              105
                                                  110
Phe Ile His Phe Phe Thr Val Met Glu Ser Ile Val Leu Leu Ala Met
                           120
                                              125
Gly Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Thr Thr
                      135
                                          140
Ile Leu Thr Asn Arg Ile Ile Val Val Ile Ala Val Leu Val Val Ile
                  150
                                      155
Arg Ser Leu Cys Met Ile Val Pro Ile Ile Phe Leu Leu Arg Leu
               165
                                  170
```

Pro Tyr Cys Gly His Arg Ile Ile Pro His Thr Tyr Cys Glu His Met

Gly Val Ala Arg Leu Ala Cys Ala Ser Ile Arg Ala Asn Ile Tyr Phe 200

Gly Leu Gly Asn Ile Ser Ile Leu Phe Leu Asp Val Phe Leu Ile Ile

Val Ser Tyr Ala Arg Ile Leu Tyr Ala Val Phe His Leu Pro Ser Gln

Asp Ala Arg Leu Lys Ala Leu Asn Thr Cys Ser Ser His Ile Cys Val

Ile Leu Ala Phe Phe Gly Pro Ala Leu Phe Ser Phe Leu Thr His Arg 265 Phe Gly His Asn Ile Pro Gln Tyr Ile His Ile Leu Leu Ala Asn Leu 280

215

230

245

185 ′

205

220

235

250

```
290
                        295
Thr Lys Gln Ile Gln Gln Arg Val Lys Asn Leu Phe Val
305
                    310
<210> 1328
<211> 319
<212> PRT
<213> Mus musculus
<400> 1328
Met Ala Pro Ser Asn Ser Ser Val Ser Val Ser Ser Thr Phe Tyr Leu
1
Thr Gly Ile Pro Gly Tyr Glu Glu Phe His His Trp Ile Ser Ile Pro
            20
Phe Cys Leu Ile Tyr Ile Ile Gly Val Thr Gly Asn Cys Ser Ile Leu
                            40
His Ile Val Arg Thr Asp Pro Lys Leu His Glu Pro Met Tyr Tyr Phe
                        55
Leu Ala Met Leu Ser Leu Thr Asp Met Ala Met Ser Leu Pro Ala Met
                    70
Val Ser Leu Phe Arg Val Leu Trp Ser Ile Ser Arg Glu Ile Gln Phe
                85
                                     90
Asn Ile Cys Val Val Gln Met Phe Leu Ile His Thr Phe Ser Phe Thr
            100
                                105
                                                     110
Glu Ser Ser Val Leu Leu Ala Met Ala Leu Asp Arg Tyr Val Ala Ile
                            120
                                                 125
Cys His Pro Leu Arg Tyr Ala Thr Ile Leu Thr Pro Lys Leu Ile Ala
                        135
                                             140
Lys Ile Gly Ile Ala Ala Leu Leu Arg Ser Ala Ile Pro Leu Ile Pro
                    150
                                         155
Leu Leu Val Arg Leu Ala Phe Phe Ser Phe Cys Arg Ser His Val Leu
                                    170
                                                         175
Ser His Ser Tyr Cys Leu His Gln Asp Ile Ile Arg Leu Ala Cys Ala
            180
                                185
                                                    190
Asp Ile Arg Phe Asn Val Ile Tyr Gly Met Val Val Ile Leu Met Leu
        195
                            200
                                                 205
Trp Gly Met Asp Ser Leu Gly Ile Leu Ile Thr Tyr Val Phe Ile Leu
    210
                        215
                                             220
His Ser Val Leu Arg Ile Ala Ser Arg Glu Gly Arg Leu Lys Ala Leu
                    230
                                         235
Asn Thr Cys Ala Ser His Ile Cys Ala Val Leu Ile Leu Tyr Val Pro
                                    250
                                                         255
Met Ile Gly Leu Ser Ile Val His Arg Phe Ala Lys His Ser Ser Pro
                                265
                                                     270
Phe Val His Ile Phe Met Ala His Ile Tyr Leu Met Val Pro Pro Val
                            280
Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Gln Gly
                        295
                                            300
Ile Phe His Leu Ile Cys Pro His Lys Ile Asn Ser Ser Ala Met
                    310
<210> 1329
<211> 317
<212> PRT
<213> Mus musculus
```

Tyr Val Val Ile Pro Pro Ala Leu Asn Pro Val Ile Tyr Gly Ile Arg

```
<400> 1329
Met Val Gly Phe Asn Ser Asn Glu Ser Ser Ala Thr Tyr Phe Ile Leu
                                    10
Ile Gly Leu Pro Gly Leu Glu Glu Val Gln Phe Trp Leu Ala Phe Pro
Leu Cys Ser Leu Tyr Leu Ile Ala Val Leu Gly Asn Leu Thr Ile Ile
                            40
Tyr Ile Val Arg Thr Glu His Ser Leu His Glu Pro Met Tyr Ile Phe
                        55
Leu Cys Met Leu Ser Gly Leu Asp Ile Leu Ile Ser Thr Ser Ser Met
                    70
                                        75
Pro Lys Met Met Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Gln Phe
                85
                                     90
Asp Ala Cys Leu Val Gln Met Phe Ala Ile His Ser Leu Ser Gly Met
            100
                                105
                                                     110
Glu Ser Thr Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
                                                 125
                            120
Cys His Pro Leu Arg His Ala Thr Val Leu Thr Leu Pro Arg Val Ala
                        135
                                             140
Lys Ile Gly Met Ala Ala Val Val Arg Gly Ala Val Leu Met Ala Pro
                    150
                                         155
Leu Pro Val Phe Ile Lys Arg Leu Pro Phe Cys Arg Ser Asn Ile Leu
                                    170
Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ala
            180
                                185
                                                     190
Asp Ile Arg Val Asn Ile Ile Tyr Gly Leu Ile Val Ile Ile Ser Ala
        195
                            200
Ile Gly Leu Asp Ser Leu Leu Ile Ser Phe Ser Tyr Leu Leu Ile Leu
                        215
                                             220
Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys Ala Phe Gly
                    230
                                         235
                                                             240
Thr Cys Val Ser His Val Cys Ala Val Phe Ile Phe Tyr Val Pro Phe
                                    250
Ile Gly Leu Ser Met Val His Arg Phe Ser Lys Arg Arg Asp Ser Leu
                                265
Leu Pro Val Ile Met Ala Asn Ile Tyr Leu Leu Val Pro Pro Val Leu
Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Glu Ile Arg Gln Arg Ile
Leu Arg Leu Phe Leu Val Thr Thr His Thr Ser Asp His
<210> 1330
<211> 314
<212> PRT
<213> Mus musculus
<400> 1330
Met Pro Ser Phe Asn Glu Ser Thr Ala Tyr Pro Pro Val Phe Phe Leu
Thr Gly Ile Pro Gly Leu Glu Thr Ser His Thr Trp Ile Ser Ile Pro
                                25
Phe Cys Cys Leu Tyr Ala Ile Ala Ile Ser Gly Asn Ser Met Ile Leu
        35
Phe Val Ile Ile Thr Glu Ser Ser Leu His Glu Pro Met Tyr Tyr Phe
Leu Ser Met Leu Ser Phe Thr Asp Leu Gly Leu Cys Leu Ser Thr Leu
```

70

```
Val Thr Val Leu Gly Ile Phe Trp Phe Asn Val Arg Glu Ile Ser Phe
Asp Ala Cys Ile Gly Gln Met Phe Phe Ile His Gly Phe Thr Phe Met
                                105
Glu Ser Ser Val Leu Leu Val Met Ala Phe Asp Arg Phe Ile Ala Ile
                            120
Cys Asn Pro Leu Arg Tyr Ala Met Ile Leu Thr Asn Ser Arg Ile Ile
                        135
Ala Val Gly Phe Ala Ile Ile Ile Arg Gly Thr Thr Ala Leu Val Pro
Leu Leu Leu Leu Lys Arg Leu Ser Phe Cys Arg Ser His Val Leu
His His Ser Tyr Cys Phe His Pro Asp Val Met Lys Leu Ser Cys Ser
                                185
Asp Thr Arg Ile Asn Ser Ala Phe Gly Leu Ala Ile Val Ile Ser Thr
                            200
Ala Gly Leu Asp Ser Val Leu Ile Leu Leu Ser Tyr Val Leu Ile Ile
                        215
His Ser Val Leu Cys Ile Ala Ser Lys Glu Glu Arg Lys Lys Ala Phe
                    230
Gly Thr Cys Val Ser His Leu Ser Ala Val Ala Ile Phe Tyr Ile Pro
                                    250
Met Ile Ser Leu Ser Leu Val His Arg Phe Gly Lys His Ala Pro Pro
                                265
Phe Val His Thr Leu Ile Ala Asn Val Tyr Leu Leu Ile Pro Pro Val
                            280
Met Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Lys Ala
                        295
Met Leu Lys Val Phe Phe Val Lys Pro Ser
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1331

Met Leu Ile Leu Asn Asn Thr His Ser Gln Leu Pro Thr Phe Leu Leu Thr Gly Ile Pro Gly Leu Arg Ala Ala Gln Val Trp Ile Ser Ile Pro 25 Phe Cys Leu Leu Tyr Val Ile Ala Leu Ser Gly Asn Ser Met Ile Leu 40 Leu Val Ile Val Arg Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Phe 55 Leu Ser Met Leu Ser Ile Thr Asp Leu Ser Leu Ser Leu Cys Thr Leu 75 Ser Thr Thr Leu Gly Val Leu Trp Phe Glu Ala Arg Glu Ile Asn Leu 85 90 Asn Ala Cys Ile Ala Gln Met Phe Phe Leu His Gly Phe Thr Phe Met 105 Glu Ser Gly Val Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile 120 125 Cys Asp Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asn Ala Arg Ile Ala 135 140 Gln Ile Gly Thr Ile Val Leu Ile Arg Asn Val Ala Val Met Leu Pro Val Val Leu Phe Val Lys Arg Leu Ser Phe Cys Ser Ser Leu Val Leu

```
170
Ser His Ser Tyr Cys Tyr His Val Asp Val Ile Gln Leu Ser Cys Thr
            180
                                185
Asp Asn Arg Ile Asn Ser Val Leu Gly Leu Phe Ala Leu Phe Ser Thr
                            200
        195
Thr Gly Phe Asp Cys Pro Cys Ile Leu Leu Ser Tyr Val Leu Ile Ile
                        215
Arg Ser Val Leu Ser Ile Ala Ser Ser Asp Glu Arg Gln Lys Ala Phe
                    230
                                        235
Asn Thr Cys Ile Ser His Ile Ser Ala Val Ala Ile Phe Tyr Ile Pro
                245
                                    250
Leu Ile Ser Leu Ser Leu Val His Arg Tyr Gly His Ser Ala Pro Ala
            260
                                265
Phe Val His Thr Val Met Ala Asn Val Phe Leu Leu Ile Pro Pro Val
Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Lys Ala
Ile Leu Lys Val Leu Asn Gln Lys Gln Asn Gln Leu
<210> 1332
<211> 313
<212> PRT
<213> Mus musculus
<400> 1332
Met Ser Val Ile Asn Asp Ser Ser Leu Tyr Pro Arg Phe Leu Leu Thr
                                    10
Gly Phe Pro Gly Leu Glu Thr Arg Tyr Gly Leu Ile Ser Ile Pro Ile
                                 25
            20
Phe Leu Val Tyr Val Thr Ser Ile Ala Gly Asn Ile Thr Ile Leu Phe
                            40
Ile Ile Arg Thr Glu Ser Ser Leu His Gln Pro Met Tyr Tyr Phe Leu
                        5.5
Ser Met Leu Ala Leu Thr Asp Leu Gly Leu Ser Thr Thr Thr Leu Pro
                    7.0
                                        7.5
Thr Met Phe Ser Val Phe Trp Phe Gln Ala Arg Glu Ile Pro Phe Asn
                85
                                    90
Ala Cys Leu Val Gln Met Tyr Phe Ile His Val Phe Ser Ile Ile Glu
            100
                                105
                                                     110
Ser Ala Val Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile Arg
                            120
        115
                                                 125
Glu Pro Leu Arg Tyr Ala Ala Ile Leu Thr Asn Thr Val Ile Val Gly
                        135
                                             140
Ile Gly Leu Ala Ile Ala Gly Arg Ala Leu Ala Leu Val Phe Pro Ala
                    150
                                        155
Ser Phe Leu Leu Lys Arg Leu Gln Tyr Arg Val Ile Asn Ile Leu Ser
                                    170
                165
                                                         175
Tyr Pro Phe Cys Leu His Gln Asp Leu Ile Lys Thr Thr Val Ser Ser
            180
                                185
                                                     190
Arg Trp Val Ser Ser Ile Tyr Gly Leu Met Val Val Ile Phe Ser Met
                            200
        195
Gly Leu Asp Ser Leu Leu Leu Leu Ser Tyr Ile Leu Ile Leu Gly
                                             220
                        215
Thr Val Leu Ser Ile Ala Ser Lys Ala Glu Arg Ile Lys Ala Leu Asn
```

230

Thr Cys Ile Ser His Ile Cys Ala Val Leu Thr Phe Tyr Thr Pro Met

Ile Gly Leu Ser Met Ile Arg Arg Tyr Gly Gln Asn Ala Ser Pro Ile 260 265 270 Val His Val Ile Met Ala Asn Val Tyr Leu Leu Val Pro Pro Leu Met 275 280 285 Asn Pro Ile Val Tyr Ser Val Lys Thr Lys Gln Ile Arg Asp Arg Ile 295 300 Leu Arg Lys Leu Lys Lys Gln Lys Val 310

<210> 1333 <211> 318 <212> PRT <213> Mus musculus

<400> 1333 Met Ala Asp His Asn His Ser Gln Ser Gln His Leu Tyr Phe Ile Leu Thr Gly Ile Pro Gly Leu Glu Gln Lys Tyr Tyr Trp Met Ala Phe Pro Leu Gly Ala Ile Tyr Val Ile Ala Leu Phe Gly Asn Gly Val Ile Ile Ser Thr Ile Lys Ser Glu Ser Ser Leu His Ile Pro Met Tyr Tyr Phe Leu Cys Met Leu Ala Phe Ala Asp Met Gly Leu Thr Leu Cys Thr Leu Pro Ser Met Leu Gly Ile Phe Trp Phe Asn Tyr Lys Phe Ile Thr Phe Asp Gly Cys Leu Val Gln Met Tyr Phe Ile His Thr Phe Ser Ala Ile 100 105 120 125 135 140

110 Glu Ser Gly Val Leu Val Ala Met Ala Ile Asp Arg Val Ile Ala Ile Trp Ser Pro Leu Arg Tyr Gly Thr Ile Leu Thr Asn Gly Val Val Cys Lys Ile Gly Met Leu Ile Leu Ser Arg Ala Val Cys Val Val Phe Pro 150 155 Val Pro Phe Leu Ile Lys Arg Leu Pro Phe Tyr Arg Ser Asn Ile Leu 170 Ser His Ser Phe Cys Leu His Gln Asp Val Met Arg Leu Ala Cys Ala 180 185 190 Ser Thr Arg Val Asn Ser Leu Tyr Gly Leu Ile Ala Val Ile Phe Thr 195 200 205 Lys Gly Ser Asp Ser Leu Ser Ile Leu Ile Ser Tyr Val Phe Ile Leu 215 220 Arg Thr Val Met Ala Ile Ala Ser Gly Glu Gly Arg Leu Lys Ala Leu 230 235 Asn Thr Cys Val Ser His Ile Cys Ala Val Leu Ile Phe Tyr Val Pro 245 250 Leu Ile Gly Val Ser Val Ile His Arg Phe Gly Lys His Leu Ser Pro 265 270 Leu Thr His Ala Leu Met Ala Asn Ala Tyr Leu Leu Val Pro Pro Val 280 Leu Asn Pro Ile Val Tyr Thr Val Lys Thr Lys Glu Ile Arg Lys Lys 295 Ile Ile Gln Ile Phe Ile Arg Thr Lys Ile Thr Thr Glu Gly 310

. 1

<211> 314 <212> PRT <213> Mus musculus <400> 1334 Met Val Ala Ser Ser Asn Ser Ser Ser His Pro Leu Phe Phe Met Leu 10 Leu Gly Ile Pro Gly Leu Glu Asn Tyr Gln Phe Trp Ile Ala Phe Pro 25 Phe Cys Val Met Tyr Ile Val Ala Leu Thr Gly Asn Ile Thr Ile Leu Tyr Ile Ile Arg Ile Asp His Thr Leu His Glu Pro Met Tyr Leu Phe 55 Leu Ala Leu Leu Ala Ile Thr Asp Leu Val Leu Ser Ser Ser Thr Gln 70 75 Pro Lys Met Leu Ala Ile Leu Trp Phe His Ser His Glu Ile Glu Tyr 90 Asn Ala Cys Leu Ile Gln Val Phe Phe Ile His Ala Phe Ser Ser Val 105 Glu Ser Gly Val Leu Met Thr Met Ala Leu Asp Arg Tyr Val Ala Ile 120 125 Cys Phe Pro Leu Arg His Ser Ser Ile Leu Thr Thr Ser Val Val Ile 135 140 Lys Leu Gly Ala Ala Val Met Val Arg Gly Leu Leu Trp Val Ser Pro 150 155 Phe Cys Phe Met Val Ser Arg Met Pro Phe Cys Pro Asn Lys Val Ile 170 Pro Gln Ser Tyr Cys Glu His Met Ala Val Leu Lys Leu Val Cys Ala 180 185 190 Asp Thr Arg Val Asn Arg Gly Tyr Gly Leu Phe Val Ala Phe Ser Val 195 200 205 Val Gly Phe Asp Ile Ile Val Ile Ser Val Ser Tyr Val Met Ile Leu 220 215 Arg Ala Val Leu Arg Leu Pro Ser Gly Glu Ala Arg Leu Lys Ala Phe 230 235 Gly Thr Cys Ala Ser His Val Cys Val Ile Leu Ala Phe Tyr Ile Pro 250 245 Ala Leu Phe Thr Phe Leu Thr His Arg Phe Gly His His Val Pro Arg 260 265 Val Val His Ile Met Phe Ala Asn Phe Tyr Leu Leu Val Pro Pro Met 280 Leu Asn Pro Ile Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Asp Arg 295 Val Ile Arg Gly Phe Arg Arg Lys Asp Pro 310 <210> 1335 <211> 319 <212> PRT <213> Mus musculus <400> 1335 Met Leu Gln Met Gln Asp Asn Thr Glu Phe Leu Ser Asn Phe Thr Ser 1 10 Lys Leu Ser Thr Phe Leu Leu Thr Gly Ile Pro Gly Leu Glu Ser Ala 25

His Gly Trp Ile Ser Ile Pro Phe Cys Cys Leu Tyr Ala Thr Ala Leu

```
Ser Gly Asn Ser Met Ile Leu Phe Ile Ile Val Thr Gln His Ser Leu
His Glu Pro Met Tyr Tyr Phe Leu Ser Val Leu Ser Ala Thr Asp Leu
                    70
Gly Leu Thr Phe Ser Thr Met Ser Thr Thr Leu Arg Ile Leu Trp Phe
Gln Ala Asn Glu Ile Ser Leu Asp Leu Cys Ile Val Gln Met Phe Phe
                                105
Leu His Gly Phe Thr Cys Thr Glu Ser Gly Val Leu Val Ala Met Ala
                            120
Phe Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg Tyr Thr Met Ile
Leu Thr Asn Ser Arg Ile Ile Gln Ile Gly Phe Leu Val Ile Met Arg
                    150
                                        155
Thr Leu Leu Leu Ile Ile Pro Leu Leu Leu Leu Lys Pro Val Ser
                                    170
Phe Cys Lys Arg Asn Thr Leu Ser His Ser Tyr Cys Tyr Tyr Pro Asp
                                185
                                                    190
Val Ile Lys Leu Ala Cys Ser Asp Thr Arg Ala Asn Asn Ile Cys Gly
                            200
        195
Leu Val Asp Leu Ile Leu Thr Thr Gly Leu Asp Ile Pro Cys Ile Val
                        215
Leu Ser Tyr Ile Leu Ile Ile Arg Ser Val Leu Asn Ile Ala Ser Ser
                    230
                                        235
Glu Glu Arq His Lys Ala Phe Ser Thr Cys Val Ser His Ile Ala Ala
                                    250
Val Ala Val Phe Tyr Ile Pro Met Phe Ser Leu Ser Leu Val His Arg
            260
                                265
Tyr Gly Arg Ser Val Pro Lys Val Val His Thr Met Met Ala Asn Val
                            280
Tyr Leu Leu Leu Pro Pro Val Leu Asn Pro Ile Ile Tyr Ser Val Lys
Thr Lys Gln Ile Arg Lys Ala Ile Leu Ser Leu Leu Phe Ala Lys
```

```
<210> 1336
```

<400> 1336

 Met
 Ser
 Thr
 Leu
 Glu
 Asn
 Thr
 Thr
 Ala
 Ser
 Ser
 Ile
 Ile
 Phe
 Leu
 Leu
 Leu
 Glu
 Ala
 Phe
 His
 Thr
 Trp
 Ile
 Ser
 Ile
 Pro
 Pro
 Ser
 Ile
 Pro
 Ser
 Ile
 Pro
 Ser
 Ile
 Pro
 Ser
 Ile
 Ile
 Ser
 Ile
 Pro
 Ser
 Ile
 Ile</th

<211> 316

<212> PRT

<213> Mus musculus

```
130
                        135
                                             140
Val Ile Gly Val Ala Ile Ile Thr Arg Gly Thr Leu Ile Gln Thr Pro
                    150
                                         155
Leu Ala Val Leu Leu Lys Arg Leu Ser Phe Cys Ser Ser His Val Leu
                                     170
His His Ser Tyr Cys Phe His Pro Asp Ile Met Lys Leu Ser Cys Thr
            180
                                 185
                                                     190
Asp Thr Arg Ile Asn Ser Ala Val Gly Leu Thr Ala Leu Ile Ser Thr
                            200
Ala Gly Val Asp Ser Val Phe Ile Ile Leu Ser Tyr Val Leu Ile Ile
                        215
                                             220
Arg Thr Val Leu Ser Ile Ala Ser Pro Glu Glu Arg Lys Lys Ala Phe
                    230
                                         235
Ser Thr Cys Ile Ser His Ile Gly Ala Val Ala Val Phe Tyr Ile Pro
                                     250
Leu Ile Ser Leu Ser Phe Val His Arg Phe Gly Lys Arg Ala Pro Pro
            260
                                 265
Tyr Val His Thr Leu Ile Ala Asn Ala Tyr Leu Leu Ile Pro Pro Val
                             280
Met Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Lys Ala
                        295
Val Leu Lys Val Leu His Ser Ser Met Thr Lys Ser
                    310
<210> 1337
<211> 322
<212> PRT
<213> Mus musculus
```

<400> 1337 Met Ser Pro Leu Ser Ala Gln Asp Thr Ser Asn Ile Ser Ser Leu Met Ala Pro Thr Phe Leu Leu Val Gly Leu Pro Gly Leu Glu Ala Ala Pro Ser Trp Trp Ser Val Pro Leu Ile Thr Ile Tyr Leu Phe Ser Ala Phe 40 45 Gly Asn Gly Thr Ile Leu Trp Ile Ile Ala Leu Glu Pro Thr Leu His 55 Arg Pro Met Tyr Phe Phe Leu Phe Leu Ser Val Ser Asp Val Gly 70 75 Leu Ala Thr Val Leu Met Pro Thr Leu Leu Gly Leu Ala Phe Ala Asp Ala His Thr Val Pro Ala Ser Ala Cys Leu Leu Gln Met Phe Phe Ile 105 His Val Phe Ser Val Met Glu Ser Ser Val Leu Leu Ala Met Ala Phe 120 Asp Arg Ala Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val Leu Leu 135 140 Thr Asn Gly Val Ile Arg Lys Ile Ala Val Ala Ile Ala Phe Arg Cys 150 155 Leu Ser Leu His Leu Pro Leu Pro Ile Leu Leu Ala Arq Met Pro Tyr 165 170 Cys Arg Pro Gln Val Leu Thr His Ser Tyr Cys Leu His Pro Asp Met 185 190 Ala Arg Leu Ala Cys Pro Glu Ala Trp Gly Ala Val Tyr Ser Leu Val 200 205 Val Val Leu Ser Ala Met Ala Leu Asp Pro Leu Leu Ile Phe Phe Ser 220

```
Tyr Gly Leu Ile Gly Arg Ala Leu Gln Gly Val Gly Ser Ala Glu Asp
                    230
                                         235
Arg Trp Lys Ala Gly Gln Thr Cys Ala Ala His Leu Ser Ala Val Leu
                245
                                    250
Leu Phe Tyr Ile Pro Met Ile Leu Leu Ala Leu Ile Asp Arg Phe Lys
                                265
            260
Leu Pro Leu Pro Pro Pro Ala His Thr Leu Leu Ser Tyr Val His Phe
                            280
                                                 285
Leu Leu Pro Pro Leu Met Asn Pro Val Leu Tyr Ser Val Lys Met Lys
                        295
                                             300
Glu Ile Arg Glu Lys Ile Leu Lys Arg Leu Leu Pro Thr Lys Val Gly
                    310
                                         315
Cys Ala
```

<210> 1338 <211> 316 <212> PRT <213> Mus musculus

<400> 1338

Met Gly Ala Glu Asn Asn Glu Ser Leu Asp Leu Leu Ser Ile Phe Leu Thr Gly Ile Pro Gly Leu Glu Ala Gln His Gly Trp Leu Ser Ile Pro Phe Phe Ile Met Tyr Ile Val Ala Ile Val Gly Asn Ser Leu Ile Met Ile Ala Val Gln Gln Glu Ser Ala Leu His Glu Pro Met Tyr Leu Phe Leu Ser Met Leu Ala Ile Thr Glu Val Gly Val Ser Val Ser Thr Leu Pro Thr Val Met Gly Ile Leu Trp Phe Asn Ala Tyr Arg Ile Asp Phe 8.5 Asp Gly Cys Leu Ala Gln Met Phe Phe Ile His Thr Phe Ser Gly Met Glu Ser Gly Val Leu Leu Ala Met Ser Tyr Asp Arg Phe Val Ala Ile 120 125 Tyr Asn Pro Leu Arg Tyr Thr Ala Ile Leu Thr Leu Pro Arg Ile Ile 135 140 Ser Met Gly Leu Gly Ile Thr Leu Lys Ser Val Ala Leu Met Ala Pro 150 155 Leu Pro Ile Leu Leu Lys Gln Leu Pro Tyr Cys His Ile Asn Ile Leu 170 Ser His Ser Tyr Cys Leu His Ser Asp Leu Ile Gln Leu Pro Cys Ala 180 185 190 Asp Thr Arg Leu Asn Ser Ile Leu Gly Leu Ala Ile Val Leu Ala Thr 195 200 Phe Gly Leu Asp Ser Leu Leu Ile Val Val Ser Tyr Gly Leu Ile Leu 215 Tyr Thr Val Met Gly Ile Ala Ser Gly Glu Gly Arg Lys Lys Thr Leu 235 230 Asn Thr Cys Val Ser His Ile Cys Ala Val Leu Ile Tyr Tyr Val Pro 250 Met Ile Gly Val Ser Val Met His Arg Val Ala Lys His Ala Ser Pro 265 270 Val Val His Thr Leu Met Ser Ser Ile Tyr Leu Phe Val Pro Pro Val 280 Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Arg Pro Ile Gln Gln Gly

```
295
Ile Ala Asn Leu Phe Ser Cys Lys Lys Gly Ser Ile
                    310
                                        315
<210> 1339
<211> 317
<212> PRT
<213> Mus musculus
<400> 1339
Met Val Gly Asn Ile Thr His Gln Gln Ile Ala Ser Phe Phe Leu Val
                - 5
                                    10
Gly Ile Pro Gly Leu Glu Asn Val His Cys Trp Ile Gly Ile Ser Val
            20
                                25
                                                     30
Cys Leu Leu Phe Val Leu Thr Leu Leu Gly Asn Ser Ile Val Ile Ala
       35
                            40
Thr Ile Lys Leu Glu Pro Ser Leu His Gln Pro Met Tyr Phe Phe Leu
                        55
Cys Met Leu Ala Met Asn Asp Met Cys Leu Ser Ser Ala Ala Leu
                    70
                                        75
Lys Met Leu Gly Ile Phe Trp Phe Asp Ala His Trp Ile Asn Phe Asp
                85
                                    90
Ala Cys Leu Thr Gln Met Tyr Phe Ile His Thr Leu Cys Ile Met Glu
            100
                                105
Ser Ala Ile Leu Val Ala Met Ala Phe Asp Arg Phe Val Ala Ile Cys
                            120
                                                 125
Ile Pro Leu His Tyr Ala Ser Ile Leu Thr Thr Ser Met Val Ile Lys
                        135
                                            140
Leu Gly Leu Val Gly Leu Met Arg Cys Val Leu Met Val Leu Pro Cys
                    150
                                        155
Pro Ile Leu Ile Lys Arg Leu Pro Tyr Tyr Thr Lys Tyr Val Ile Pro
                                    170
His Thr Tyr Cys Glu His Met Ala Val Lys Leu Ala Ser Ala Asn
            180
                                185
                                                     190
Thr Leu Ile Asn Arg Ala Tyr Gly Ile Ser Val Ala Leu Ser Val Ile
                            200
Thr Val Asp Leu Gly Leu Ile Ala Thr Ser Tyr Val Lys Ile Leu Gln
                        215
                                            220
Ser Val Phe Arg Leu Ser Ser Gln Asn Ala Arg Ser Lys Ala Leu Gly
                    230
                                        235
                                                             240
Thr Cys Ala Ala His Val Cys Thr Ile Leu Val Ser Tyr Ile Pro Ala
                                    250
Leu Phe Ser Phe Leu Ser His Arg Ile Gly Lys Lys Val Pro Pro Ser
            260
                                265
                                                     270
Val His Ile Ile Phe Ala Ser Met Tyr Leu Leu Val Pro Ser Ala Val
                            280
Asn Pro Val Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Asp Arg Val
                        295
Ile Asp Leu Phe Phe Thr His Lys Lys Phe Ser Glu Lys
                    310
<210> 1340
<211> 319
<212> PRT
<213> Mus musculus
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<400> 1340

```
Met Ser Tyr Ser Asn His Ser Ser Thr Ser Phe Phe Leu Thr Gly Leu
Pro Gly Leu Glu Thr Val Tyr Leu Trp Leu Ser Ile Pro Leu Cys Thr
Met Tyr Ile Ala Ser Leu Ala Gly Asn Gly Leu Ile Leu Trp Val Val
Lys Ser Glu Pro Ser Leu His Gln Pro Met Tyr Tyr Phe Leu Ser Met
                                          . 60
Leu Ala Val Thr Asp Leu Gly Leu Ser Val Ser Thr Leu Pro Thr Met
                                        75
                    70
Leu Thr Ile Tyr Met Met Gly Val Ser Glu Val Ala Leu Asp Met Cys
Leu Ala Gln Leu Phe Phe Ile His Thr Phe Ser Ile Met Glu Ser Ser
            100
                                105
Val Leu Leu Thr Met Ala Phe Asp Arg Val Val Ala Ile Ser Ser Pro
                            120
        115
Leu His Tyr Ala Thr Ile Leu Thr Asn Pro Arg Val Ala Ser Leu Gly
                        135
                                            140
Met Val Ile Leu Val Arg Ser Ile Gly Leu His Ile Pro Ala Pro Ile
                    150
Met Leu Lys Lys Leu Pro Tyr Cys Gln Lys Arg His Leu Ser His Ser
                                    170
Tyr Cys Leu His Pro Asp Val Met Lys Leu Ala Cys Thr Asp Thr Arg
            180
                                185
                                                    190
Ile Asn Ser Ala Tyr Gly Leu Phe Val Val Leu Ser Thr Leu Gly Val
        195
                            200
Asp Ser Val Leu Ile Val Leu Ser Tyr Gly Leu Ile Leu Tyr Thr Val
                                            220
                        215
Leu Ser Ile Ala Ser Lys Thr Glu Arg Leu Lys Ala Leu Asn Thr Cys
                    230
                                        235
Val Ser His Ile Cys Ser Val Leu Leu Phe Tyr Thr Pro Met Ile Gly
                245
                                    250
Leu Ser Met Ile His Arg Phe Gly Lys Trp Ala Ser Pro Cys Ser Arg
            260
                                265
                                                    270
Val Leu Leu Ser Tyr Leu His Phe Leu Thr Pro Pro Val Leu Asn Pro
                            280
Val Val Tyr Thr Ile Lys Thr Lys Gln Ile Arg Gln Arg Ile Trp Cys
                        295
Ile Phe Arg Cys Gly Gly Arg Ser Ile Gly His Ile Gln Gly His
```

```
<210> 1341
```

<400> 1341

Met Ala Ile Ser Lys His Ser Asn Ala Ser Ser Phe Phe Phe Ile Leu 1 5 10 15

Met Asp Leu Pro Gly Leu Glu Thr Ser His Cys Trp Thr Ala Ile Pro 20 25 30

Ile Cys Leu Ile Tyr Val Leu Ser Val Leu Gly Asn Ile Thr Ile Met 35

His Ile Val Lys Ser Val Pro Ser Leu His Thr Pro Met Tyr Leu Phe 50 60

Leu Ser Met Leu Ser Met Ala Asp Leu Gly Leu Ser Ala Ser Thr Leu 65 70 75 , 80

Pro Ser Met Val Ala Val Phe Leu Leu Gly Gln Arg Met Ile Gly Ala

<211> 315

<212> PRT

<213> Mus musculus

```
90
Val Ala Cys Phe Met Gln Leu Phe Phe Ile His Thr Phe Ser Val Ile
            100
                                105
                                                    110
Glu Ser Ala Val Leu Leu Ala Met Ala Phe Asp Arg Cys Val Ala Ile
                                                125
                            120
Arg Glu Pro Leu Arg Tyr Ala Thr Ile Leu Thr Thr Arg Arg Ile Gly
                        135
                                             140
Ala Ile Gly Leu Ala Val Val Ile Arg Ser Ala Ala Leu His Leu Pro
                    150
                                        155
Leu Pro Val Leu Leu Gly Arg Leu Thr Phe Gln Pro Val Ser Ala Leu
                                    170
Ser His Ser Tyr Cys Val His Pro Asp Val Leu Arg Leu Ser Cys Ser
            180
                                185
                                                    190
Ser Thr Leu Val Asn Ser Gly Phe Gly Leu Phe Val Met Leu Ser Thr
        195
                            200
                                                 205
Leu Gly Met Asp Ala Val Leu Ile Leu Leu Ser Tyr Val Leu Ile Leu
                        215
                                            220
Lys Thr Val Leu Ser Ile Ala Ser Asn Ala Glu Arg Leu Lys Ala Phe
                    230
                                        235
Asn Thr Cys Ile Ser His Ile Cys Ala Val Leu Leu Phe Tyr Thr Pro
                245
                                    250
Leu Val Ser Leu Ser Met Ile His Arg Phe Gly Lys Lys Leu Pro
            260
                                265
                                                    270
Ala Gln Val Tyr Met Leu Leu Ser Tyr Leu His Phe Leu Met Pro Pro
                            280
Met Leu Asn Pro Ile Val Tyr Ser Val Lys Thr Lys Glu Ile Arg Val
                        295
Arg Ile Leu Lys Met Leu His Pro Lys Lys His
                    310
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1342

Met Ser Glu Phe Asn Thr Thr Phe Gln Pro Ser Val Phe Ile Leu Thr Gly Leu Arg Gly Leu Val Gly Ala Arg Leu Trp Leu Gly Pro Leu Leu Ser Leu Met Tyr Ile Thr Thr Leu Ala Gly Asn Cys Thr Val Ile Tyr Leu Val Arg Thr Glu Arg Ser Leu Gln Glu Pro Gln Tyr Gln Phe Leu Ser Met Leu Ala Gly Ala Asp Ile Val Leu Ser Val Ser Thr Leu Phe Ser Val Leu Lys Val Phe Ile Phe Asp Leu Tyr Glu Ile Ala Phe Asp Ser Cys Leu Ala Gln Leu Phe Phe Ile His Thr Ser Ser Ser Met Gly Ser Gly Ile Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile Ser His Pro Leu Gln Tyr Thr Thr Ile Leu Thr Asn Ser Arg Val Thr Arg Met Gly Leu Ala Ala Phe Leu Arg Gly Val Ala Leu Met Met Pro Leu Pro Ile Leu Leu Lys Arg Leu Pro Phe Cys Lys Gly Gln Leu Leu Ser

```
Tyr Ser Tyr Cys Ile His Pro Asn Val Met Lys Leu Ala Cys Gly Gln
Val Lys Ile Asn Ile Phe Tyr Gly Leu Val Leu Val Ile Phe Ser Phe
                            200
Gly Val Asp Phe Leu Leu Ile Ala Ile Ser Tyr Ala Leu Ile Phe Gln
                                           220
Ala Val Met Gly Ile Ala Ser Arg Glu Gly Gln Met Lys Ala Leu Asn
                    230
                                        235
Thr Cys Leu Ser His Ile Phe Ile Val Phe Ile Tyr Tyr Gly Pro Leu
                245
                                    250
Leu Ala Ile Thr Val Met His Arg Ile Ser Arg Arg Ser Ser Pro Ile
                                265
Ala His Ala Val Leu Gly Asn Ile Tyr Leu Phe Met Pro Pro Met Leu
Asn Pro Ile Val Tyr Ser Leu Lys Thr Lys Gln Ile Arg Ser Ala Leu
                        295
Arg Lys Ser Leu Lys Ile Gln Arg Arg
                    310
```

<210> 1343 <211> 314

<212> PRT

<213> Mus musculus

<400> 1343

Met Thr Thr Leu Asn Tyr Thr Val Val Ser His Thr Val Phe His Leu 10 Leu Gly Ile Pro Gly Leu Glu Asp Gln His Met Trp Ile Ser Ile Pro 25 Phe Phe Ile Ser Tyr Ile Thr Ala Leu Leu Gly Asn Ser Leu Leu Ile 40 Phe Ile Ile Leu Thr Arg Pro Ser Leu His Gly Pro Met Tyr Leu Phe 55 60 Leu Cys Met Leu Ala Gly Ala Asp Ile Val Leu Ser Thr Ser Thr Val · 75 Pro Gln Ala Leu Ser Ile Phe Trp Phe His Ala Gly Glu Ile Ser Leu 85 90 Asp Arg Cys Ile Thr Gln Leu Phe Phe Ile His Ser Thr Phe Ile Ser 105 100 110 Glu Ser Gly Ile Leu Leu Val Met Ala Phe Asp Arg Tyr Ile Ala Ile 115 120 125 Cys Tyr Pro Leu Arg Tyr Thr Thr Val Leu Thr Asn Ser Leu Ile Gly 135 140 Lys Ile Gly Val Gly Ile Phe Leu Arg Ser Tyr Gly Thr Ile Phe Pro 150 155 Ile Ile Phe Leu Leu Lys Arg Leu Thr Phe Cys Lys Asn Asn Ile Ile 165 170 Pro His Thr Tyr Cys Glu His Ile Gly Leu Ala Lys Tyr Ala Cys Asn 180 185 Ser Ile Arg Val Asn Ile Trp Tyr Gly Phe Ser Val Leu Ile Leu Thr 195 200 205 Val Val Leu Asp Val Val Leu Ile Phe Val Ser Tyr Val Leu Ile Leu 220 215 Arg Ala Val Phe Arg Met Pro Ser Gln Asp Ala Arg His Lys Ala Leu 230 235 Asn Thr Cys Gly Ser His Val Cys Ile Ile Ile Leu Phe Tyr Gly Pro 250 Gly Ile Phe Thr Thr Leu Thr Gln Arg Phe Gly Arg His Ile Pro Pro

260 265 His Ile His Ile Leu Leu Ala Asn Val Cys Ile Leu Ala Pro Pro Met 280 Leu Asn Pro Ile Ile Tyr Gly Ile Lys Thr Lys Gln Ile Gln Glu Gln 295 300 Met Val His Val Leu Phe Thr Asn His Lys <210> 1344 <211> 318 <212> PRT <213> Mus musculus <400> 1344 Met Ala Thr Gly Asn Leu Thr His Val Thr Glu Phe Ile Leu Met Gly 10 Val Thr Asp Arg Pro Glu Leu Gln Val Pro Leu Phe Phe Leu Phe Leu Val Ile Tyr Leu Leu Thr Ala Ala Gly Asn Leu Gly Ile Ile Thr Leu 40 Thr Ser Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg 55 His Leu Ala Val Ile Asn Phe Gly Asn Ser Thr Val Ile Ala Pro Lys 70 75 Met Leu Val Asn Phe Leu Val Ser Lys Lys Thr Thr Leu Tyr Tyr Glu 90 Cys Ala Thr Gln Leu Gly Gly Phe Leu Val Phe Met Val Ser Glu Ile 105 100 Phe Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 115 Pro Leu Leu Tyr Met Val Val Val Ser Arg Arg Val Cys Leu Leu Leu 135 140 Val Phe Leu Thr Tyr Leu Phe Ser Phe Val Thr Ala Ile Val Val Thr 150 155 Pro Cys Val Phe Ser Val Ser Tyr Cys Ser Ser Asn Val Ile Asn His 170 165 Phe Tyr Cys Asp Asn Val Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr 180 190 185 His Leu Pro Glu Thr Val Val Phe Phe Phe Ser Ala Thr Asn Leu Phe 195 200 Phe Ser Met Ile Ile Val Leu Ile Ser Tyr Phe Asn Ile Val Leu Ala 215 220 Ile Leu Arg Ile Arg Ser Ser Glu Gly Arg Lys Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Met Met Ala Val Thr Val Phe Tyr Gly Thr Leu Leu 245 250 Phe Met Tyr Leu Gln Pro Arg Thr Asn His Ser Leu Asp Thr Asp Lys 260 265 Ile Ala Ser Val Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Val 280 285 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Cys Ala Leu Lys Glu Phe 295 Leu Lys Asn Pro Met Gln Lys Ile Gln Ser Tyr Met Asn Leu

```
55
Tyr Phe Phe Leu Thr Met Leu Ala Leu Ala Asp Ile Phe Leu Ser Thr
                    70
Val Thr Ile Pro Lys Val Leu Ala Ile Phe Trp Phe Gln Asp Arg Ser
                85
Ile Ser Phe Ala Ser Cys Val Ser Gln Met Phe Phe Leu His Phe Ile
Phe Val Thr Glu Ser Gly Ile Leu Leu Ser Met Ala Phe Asp Arg Tyr
Val Ala Ile Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Pro Ser
Val Ile Ile Lys Met Gly Ile Ala Ala Val Thr Arg Ser Phe Phe Ile
                    150
                                        155
Cys Phe Pro Leu Ile Phe Leu Val Tyr Arg Leu Thr Tyr Cys Gly Lys
                                    170
                                                         175
                165
Ser Ile Ile Arg His Ser Tyr Cys Glu His Met Gly Ile Ala Arg Leu
            180
                                185
Ala Cys Asp Ser Ile Lys Val Asn Ile Tyr Tyr Gly Leu Ile Val Ala
        195
                            200
Leu Phe Ser Ile Phe Leu Asp Val Val Leu Ile Ile Val Ser Tyr Ala
                        215
Arg Ile Leu Cys Ala Val Tyr Arg Ile Pro Ser Gln Asp Ala Arg Leu
                    230
                                         235
Lys Ala Leu Ser Thr Cys Gly Ser His Val Cys Val Ile Leu Leu Phe
                                    250
Tyr Met Pro Val Phe Phe Ser Ser Leu Ala His Arg Phe Gly Gly Asp
                                265
Ser Ile Pro Leu His Val His Ile Leu Leu Ala Asn Leu Tyr Val Val
                            280
Leu Pro Pro Ser Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln
                        295
Ile Gln Glu Arg Val Val Gln Leu Phe Ser Leu Asn Lys Val Ile Cys
<210> 1347
<211> 320
<212> PRT
<213> Mus musculus
<400> 1347
Met Ser Ser Cys Asn Phe Thr His Ala Thr Phe Leu Leu Ile Gly Ile
```

115 120 125
Leu Arg His Ala Ala Val Leu Asn Asn Thr Val Thr Val Gln Ile Gly
130 135 140

```
Met Val Ala Leu Val Arg Gly Ser Leu Phe Phe Pro Leu Pro Leu
                    150
                                        155
Leu Ile Lys Arg Leu Ala Phe Cys His Ser Asn Val Leu Ser His Ser
                165
                                    170
Tyr Cys Val His Gln Asp Val Met Lys Leu Ala Tyr Thr Asp Thr Leu
            180
                                185
                                                    190
Pro Asn Val Val Tyr Gly Leu Thr Ala Ile Leu Leu Val Met Gly Val
                            200
Asp Val Met Phe Ile Ser Leu Ser Tyr Phe Leu Ile Ile Arg Thr Val
                        215
Leu Gln Leu Pro Ser Lys Ser Glu Arg Ala Lys Ala Phe Gly Thr Cys
                    230
                                        235
Val Ser His Ile Ser Val Val Leu Ala Phe Tyr Val Pro Leu Ile Gly
                245
                                    250
Leu Ser Val Val His Arg Phe Gly Asn Ser Leu Asp Pro Ile Val His
                                265
Val Leu Met Gly Asp Val Tyr Leu Leu Leu Pro Pro Val Ile Asn Pro
Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Thr Arg Val Leu Ala
                        295
Met Phe Lys Ile Ser Cys Asp Lys Asp Ile Glu Ala Gly Gly Asn Thr
                    310
```

<210> 1348

<211> 329

<212> PRT

<213> Mus musculus

<400> 1348

Met Ser Asn Thr Ile Ser Gln Thr Met Glu Ser Pro Asn His Thr Asp Leu Asp Pro Ser Ile Phe Phe Leu Leu Gly Ile Pro Gly Leu Glu Gln 25 Phe His Met Trp Leu Ser Leu Pro Val Cys Cys Leu Gly Thr Ala Thr 40 45 Ile Val Gly Asn Ile Thr Ile Leu Val Val Val Ala Thr Glu Pro Thr 60 Leu His Arg Pro Val Tyr Leu Phe Leu Cys Met Leu Ser Thr Ile Asp 70 75 Leu Ala Ala Ser Phe Ser Thr Val Pro Lys Leu Leu Ala Ile Leu Trp 90 Cys Gly Ala Gly His Ile Ser Ala Ser Ala Cys Leu Thr Gln Met Phe 100 105 110 Phe Ile His Ala Phe Cys Met Met Glu Ser Thr Val Leu Leu Ala Met 120 125 Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Ser Thr 135 140 Ile Leu Thr Asp Thr Ile Ile Ala Arg Ile Gly Val Val Ala Met Met 150 155 Arg Gly Ser Leu Leu Met Leu Pro Cys Pro Phe Leu Ile Gly Arg Leu 165 170 175 Ser Phe Cys Gln Ser His Val Ile Pro His Thr Tyr Cys Glu His Met 185 Ala Val Val Lys Leu Ala Cys Gly Asp Thr Arg Pro Asn Arg Val Tyr 200 Gly Leu Thr Ala Ala Leu Leu Val Ile Gly Val Asp Leu Phe Cys Ile Gly Leu Ser Tyr Ala Leu Ile Ala Gln Ala Val Phe Arg Leu Ser Ser

```
225
                    230
Gln Glu Ala Arg Ser Lys Ala Leu Gly Thr Cys Gly Ser His Val Cys
                                    250
Val Ile Leu Ile Ser Tyr Thr Pro Ala Leu Phe Ser Phe Phe Thr His
                                265
Arg Phe Gly His His Val Pro Leu His Ile His Ile Leu Leu Ala Asn
        275
                            280
Val Tyr Leu Leu Phe Pro Pro Ala Leu Asn Pro Val Val Tyr Gly Val
                        295
Lys Thr Arg Glu Ile Arg Glu Arg Val Ala Lys Val Phe Gln Trp Gly
                   310
                                        315
Gln Gly Thr Arg Leu Lys Ile Ser Lys
                325
```

<210> 1349 <211> 317 <212> PRT

<213> Mus musculus

<400> 1349

Met Met Leu Ser Ala Ala Ile Pro Asn Gly Thr Ala Phe His Pro Pro 1 5 10 Thr Phe Val Leu Gly Ile Pro Gly Met Gln Asp Gln His Val Trp 25 Ile Ala Ile Pro Phe Cys Ser Met Tyr Ile Leu Ala Leu Val Gly Asn 40 Gly Thr Ile Leu Tyr Ile Ile Ile Thr Asp Arg Ala Leu His Glu Pro 55 Met Tyr Leu Phe Leu Cys Leu Leu Ser Ile Thr Asp Leu Val Leu Cys 70 75 Ser Thr Thr Leu Pro Lys Met Leu Ala Ile Phe Trp Leu Arg Ser His 90 8.5 Val Ile Ser Tyr His Gly Cys Leu Thr Gln Met Phe Phe Val His Ala 100 105 110 Val Phe Ala Thr Glu Ser Ala Val Leu Leu Ala Met Ala Phe Asp Arg 120 Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Thr Ser Ile Leu Asn Ala 135 140 Val Val Ile Gly Lys Ile Gly Leu Ala Cys Val Thr Arg Gly Leu Leu 150 155 Phe Val Phe Pro Phe Val Ile Leu Ile Glu Arg Leu Pro Phe Cys Gly 170 175 165 His His Ile Ile Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Lys 180 185 190 Leu Ala Cys Ala Ser Ile Lys Pro Asn Thr Ile Tyr Gly Leu Thr Val 195 200 205 Ala Leu Ser Val Thr Gly Met Asp Val Val Leu Ile Ala Thr Ser Tyr 220 215 Ile Leu Ile Leu Gln Ala Val Leu Arg Leu Pro Ser Lys Asp Ala Gln 230 235 Phe Arg Ala Phe Ser Thr Cys Gly Ala His Ile Cys Val Ile Leu Val 245 250 Phe Tyr Ile Pro Ala Phe Phe Ser Phe Phe Thr His Arg Phe Gly His 260 265 His Val Pro Pro Gln Val His Ile Ile Leu Ala Asn Leu Tyr Leu Leu 280 Val Pro Pro Val Leu Asn Pro Leu Val Tyr Gly Ile Asn Thr Lys Gln

```
305
                    310
<210> 1350
<211> 318
<212> PRT
<213> Mus musculus
<400> 1350
Met Ile Ser Ser Lys Ala Phe Val Asn Ile Thr Phe Phe Gln Pro Gln
Ser Phe Leu Met Thr Gly Ile Pro Gly Leu Glu Phe Ala His Gly Trp
Ile Ser Ile Pro Phe Ser Ser Met Tyr Thr Val Ala Leu Thr Gly Asn
Cys Leu Ile Leu Leu Ala Val Arg Arg Thr His Ser Leu His Gln Pro
Met Tyr Tyr Phe Leu Ser Met Leu Ala Leu Ser Asp Val Gly Leu Ser
Leu Ser Thr Leu Pro Ser Thr Leu Ala Val Leu Trp Phe Asp Tyr Arg
                                    90
                                                         95
Phe Ile Asp Phe Asn Ala Cys Leu Ile Gln Met Phe Phe Leu His Phe
                                105
Phe Ser Val Val Glu Ser Ser Val Leu Leu Ala Met Ser Phe Asp Arg
                            120
                                                 125
Phe Val Ala Ile Ser Asn Pro Leu Arg Tyr Ala Ser Val Leu Thr Asn
                        135
                                            140
Asn Val Ile Ile Arg Ile Gly Val Ala Ile Thr Thr Arg Ala Thr Leu
                    150
                                        155
Ser Leu Leu Pro Leu Pro Phe Leu Leu Lys Arg Leu Asn Tyr Cys Pro
                165
                                    170
                                                         175
Gly Lys Ile Leu Leu Ser His Ser Phe Cys Phe His Ala Asp Val Met
                                185
                                                     190
Lys Leu Ala Cys Ala Asp Ile Thr Val Asn Ile Leu Tyr Gly Leu Tyr
                            200
Val Val Leu Ser Thr Val Gly Ile Asp Ser Leu Leu Ile Val Met Ser
                        215
                                            220
Tyr Ser Leu Ile Leu His Thr Val Met Gly Leu Ala Ser Pro Arg Glu
                    230
                                        235
Arg Val Arg Thr Leu Asn Thr Cys Val Ser His Ile Leu Ala Val Leu
                                    250
Val Phe Tyr Ile Pro Val Ile Gly Val Ser Met Ile His Arg Phe Gly
                                265
                                                     270
Lys His Leu Pro His Ile Val His Ala Leu Val Ala Tyr Val Tyr Leu
                            280
                                                 285
Val Val Pro Pro Val Leu Asn Pro Ile Ile Tyr Ser Val Lys Ser Lys
                        295
Pro Ile Arg Gly Ala Met Phe Arg Val Leu Ser Arg Lys Gly
<210> 1351
<211> 312
<212> PRT
<213> Mus musculus
<400> 1351
```

Met Ala Leu Phe Asn Val Thr His Pro Ala Ser Phe Leu Leu Thr Gly

Ile Arq Leu Arq Ile Leu Asp Phe Phe Val Lys Arg Arg

```
Ile Pro Gly Leu Glu Ser Leu His Pro Trp Leu Ala Gly Pro Leu Cys
Val Met Tyr Ala Val Ala Leu Gly Ala Asn Thr Val Ile Leu Gln Ala
                            40
Val Arg Val Glu Pro Ile Leu His Ala Pro Met Tyr Tyr Phe Leu Ser
                        55
Met Leu Ser Phe Ser Asp Val Ala Met Ser Met Ala Thr Leu Pro Thr
                . 70
                                        75
Val Leu Arg Thr Phe Cys Phe Asp Ala Arg Ser Ile Ala Phe Asp Ala
               8.5
                                    90
Cys Leu Val Gln Met Phe Leu Ile His Ser Phe Ser Met Met Glu Ser
                                                    110
                                105
           100
Gly Ile Leu Leu Ala Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Asn
                            120
 , 115
                                                125
Pro Leu His Tyr Ala Thr Val Leu Thr Asn Glu Phe Ile Ala Gly Met
                        135
                                            140
Gly Leu Ala Val Thr Ala Arg Ser Phe Ile Thr Leu Phe Pro Leu Pro
145
                                        155
                   150
Phe Leu Ile Lys Arg Leu Pro Ile Cys Lys Ser Asn Val Leu Ser His
                                    170
               165
Ser Tyr Cys Leu His Pro Asp Met Met Lys Leu Ala Cys Ala Asp Ile
           180
                                185
                                                    190
Thr Ile Asn Ser Ile Tyr Gly Leu Phe Val Leu Val Ser Thr Phe Gly
                            200
       195
                                                205
Met Asp Leu Leu Phe Ile Phe Leu Ser Tyr Val Leu Ile Leu Arg Ser
                        215
                                            220
Val Met Ala Ile Ala Ser His Glu Glu Arg Leu Lys Ala Leu Asn Thr
                   230
                                        235
Cys Val Ser His Ile Leu Ala Val Leu Ala Phe Tyr Val Pro Met Ile
               245
                                    250
Gly Val Ser Thr Val His Arg Phe Gly Lys His Ala Pro Arg Tyr Ile
           260
                                265
                                                    270
His Val Leu Met Ser Asn Val Tyr Leu Phe Val Pro Pro Val Leu Asn
                                               285
                           280
Pro Leu Ile Tyr Ser Ala Lys Thr Lys Glu Ile Arg Arg Ala Ile Phe
                        295
Arg Met Phe Arg Arg Ile Lys Leu
                   310
<210> 1352
<211> 309
<212> PRT
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<213> Mus musculus

<400> 1352

Met Glu Pro Arg Asn Asn Thr His Ile Leu Glu Phe Phe Leu Leu Gly 1 5 10 Phe Ser Gln Asp Pro Asn Leu Gln Pro Val Ile Cys Gly Leu Phe Leu 25 Ser Met Tyr Leu Ile Thr Val Val Gly Asn Leu Leu Ile Ile Leu Thr 35 40 Ile Ile Ser Asp Ala Asn Leu His Thr Pro Met Tyr Phe Phe Leu Ser 60 55 Asn Leu Ser Phe Val Asp Ile Cys Phe Val Ser Thr Thr Val Pro Lys 70 7.5 Met Leu Val Asn Ile Gln Thr Lys Arg Lys Ser Ile Ser Tyr Ala Asp

```
Cys Ile Thr Gln Met Tyr Phe Phe Leu Ile Phe Val Glu Leu Asp Asn
                                105
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu His Tyr Thr Gly Ile Met Asn Arg Arg Leu Cys Gly Phe Leu
                        135
                                            140
Val Leu Val Cys Trp Ile Val Ser Val Leu His Ala Leu Leu Gln Ser
                    150
                                        155
Met Met Val Leu Arg Leu Ser Phe Cys Thr Asp Leu Glu Ile Pro His
                                     170
                165
Phe Phe Cys Glu Leu Asn Gln Val Ala Gln Leu Thr Cys Ser Asp Thr
                                185
Phe Leu Asn Asp Val Val Met Tyr Phe Ala Leu Val Leu Leu Ala Ile
                            200
Val Pro Leu Phe Gly Ile Leu Tyr Ser Tyr Ser Lys Ile Val Ser Ser
                        215
                                             220
Ile Arg Ala Met Ser Thr Val Gln Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Phe Thr Gly Leu
                                    250
Gly Val Tyr Leu Ser Ser Ala Val Ser His Ser Ser Gln Ala Ser Ala
Thr Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Arg Leu
                        295
Leu Gly Val Lys Leu
305
```

<210> 1353

<211> 312

<212> PRT

<213> Mus musculus

<400> 1353

Met Pro Ser Asn Asn Glu Thr Ala Ser His Pro Ser Leu Phe His Leu Leu Gly Ile Pro Gly Leu Glu Ala Phe His Ile Trp Ile Ala Phe Pro Phe Phe Val Val Tyr Leu Ile Ala Leu Val Gly Asn Phe Thr Ile Leu Cys Val Ile Lys Asn Glu Gln Ser Leu His Gln Pro Met Phe Tyr Phe 55 Leu Ala Leu Leu Ser Phe Ile Asp Leu Gly Leu Ser Thr Ser Thr Ile Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Leu Arg Glu Ile Ser Phe Glu Gly Cys Leu Ile Gln Met Phe Phe Ile His Thr Tyr Thr Gly Met 105 110 Glu Ser Val Val Leu Leu Ala Met Ala Ile Asp Arg Phe Val Ala Ile 120 125 Cys Tyr Pro Leu Arg Tyr Thr Ser Val Leu Thr Asn Lys Val Val Ala 140 Val Met Ala Ser Val Val Ile Gly Arg Pro Val Leu Leu Val Ile Pro 150 155 Phe Cys Pro Leu Leu Lys Arg Leu Pro Phe Cys Gly His Tyr Ile Ile 170 Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Ala

```
180
                                185
Asn Ile Arg Ile Asn Ile Ile Tyr Gly Leu Phe Thr Ile Ala Ala Leu
        195
                            200
                                                 205
Ile Phe Asp Leu Ile Leu Ile Ala Phe Ser Tyr Ala Trp Ile Leu Gln
                        215
                                             220
Ala Val Phe Arg Leu Pro Ser Arg Asp Ala Arg His Lys Ala Leu Ser
                    230
                                         235
Thr Cys Gly Ser His Val Cys Val Ile Leu Ala Phe Tyr Thr Pro Ala
                                    250
Phe Phe Ser Phe Met Thr His Arg Phe Gly Arg Asn Val Pro Arg Tyr
                                265
Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Pro Pro Cys Leu
                            280
Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Glu Gly Val
                        295
Leu Lys Ile Phe Val Lys Lys Glu
                    310 .
<210> 1354
<211> 317
<212> PRT
<213> Mus musculus
<400> 1354
Met Ile Phe Ser Asn Asn Ser His Leu Leu Pro His Thr Phe Phe Leu
                                    10
Thr Gly Ile Pro Gly Leu Thr Ala Ala His Val Trp Ile Ser Leu Pro
                                25
Phe Cys Phe Met Phe Val Leu Ser Leu Thr Gly Asn Ala Val Leu Leu
                            40
Ser Leu Ile Trp Ile Glu His Arg Leu His Gln Pro Met Phe Leu Phe
Leu Ala Met Leu Ser Phe Val Asp Leu Val Leu Ser Leu Ser Thr Leu
Pro Lys Met Leu Ala Ile Phe Trp Phe Gly Ala Thr Ala Ile Ser Ser
                                    90
Tyr Ala Cys Leu Ser Gln Met Phe Leu Ile His Ala Phe Ser Ala Met
            100
                                105
                                                     110
Glu Ser Gly Val Leu Val Ala Met Ala Leu Asp Arg Phe Val Ala Ile
                            120
                                                125
Cys Asn Pro Leu His Tyr Ala Thr Ile Leu Thr Pro Glu Val Val Ala
                        135
                                            140
Lys Ile Gly Gly Leu Val Ala Leu Arg Gly Val Gly Leu Thr Ile Phe
                    150
                                        155
Phe Pro Ser Leu Ala Cys Arg Leu Ser Tyr Cys Gly Ser His Thr Ile
                165
                                    170
                                                         175
Ala Tyr Thr Tyr Cys Glu His Met Ser Val Val Lys Leu Ala Cys Gly
            180
                                185
                                                     190
Ala Ile Thr Val Asp Ser Leu Tyr Ala Phe Ala Val Ala Ile Phe Leu
                            200
Gly Val Gly Asp Met Ala Phe Ile Ala Tyr Ser Tyr Gly Gln Ile Val
                        215
Lys Thr Val Met Arg Phe Pro Ser Pro Glu Ala Arg Gly Lys Ala Gly
                    230
                                        235
Ser Thr Cys Thr Ala His Val Cys Val Ile Leu Phe Phe Tyr Gly Pro
                                                         255
                                    250
Gly Phe Leu Ser Val Val Met Gln Arg Phe Gly Pro Ser Thr Ala Ser
            260
```

Ala Ala Lys Val Ile Leu Ala Asn Leu Tyr Leu Leu Phe Pro Pro Ala 275 Leu Asp Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Cys 290 295 Leu Phe Thr Ile Ile Gly Ser Lys Lys Ile Glu Pro Thr 310 <210> 1355 <211> 312 <212> PRT <213> Mus musculus <400> 1355 Met Glu Lys Trp Asn Gln Ser Ser Ser Asp Phe Thr Leu Leu Gly Leu Leu Pro Gln Asn Gln Thr Gly Leu Leu Leu Met Leu Ile Ile Phe Val Phe Ser Leu Ala Leu Cys Gly Asn Ser Gly Met Ile His Leu Ile 40 Arg Val Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser Gln Leu Ser Leu Met Asp Leu Met Tyr Ile Ser Thr Thr Val Pro Lys Met 70 Ala Phe Asn Phe Leu Ser Gly Gln Lys Ser Ile Ser Phe Leu Gly Cys Gly Val Gln Ser Phe Phe Phe Leu Thr Met Ala Cys Ser Glu Gly Leu 105 Leu Leu Ala Ser Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro 120 Leu His Tyr Pro Ile Arg Met Ser Lys Ile Met Cys Leu Lys Met Ile 135 140 Ile Gly Ser Trp Ile Leu Gly Ser Ile Asn Ser Leu Ala His Thr Val 150 155 Tyr Ala Leu His Ile Pro Tyr Cys His Ser Arg Ser Ile Asn His Phe 170 Phe Cys Asp Val Pro Ala Met Leu Pro Leu Ala Cys Met Asp Thr Trp

185 190 Val Tyr Glu Tyr Met Val Phe Val Ser Thr Ser Leu Phe Leu Leu Pro Phe Leu Gly Ile Thr Ala Ser Tyr Gly Arg Val Leu Phe Ala Val 215 220 Phe His Met Arg Ser Lys Glu Gly Lys Lys Lys Ala Phe Thr Thr Cys 235 230 Ser Thr His Leu Thr Val Val Thr Phe Tyr Tyr Ala Pro Phe Val Tyr 250 245 Thr Tyr Leu Arg Pro Arg Ser Leu Arg Ser Pro Thr Glu Asp Lys Ile 260 265 270 Leu Ala Val Phe Tyr Thr Ile Leu Thr Pro Met Leu Asn Pro Ile Ile 280 Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Met Thr Arg Val Leu 295 Gly Thr Phe Pro Ser Thr Lys Pro 305 310

<210> 1356 <211> 321

<212> PRT

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<400> 1356
Met Tyr Ser Ile Arg Phe Thr Met Asn Met Lys Tyr Ile Asn Gln Thr
1
Val Val Ser Gly Phe Ile Leu Leu Gly Leu Thr Asp Asp Thr Lys Leu
                                25
Gln Leu Ile Ile Phe Ser Val Phe Leu Ser Met Tyr Leu Ala Thr Val
                            40
Ile Gly Asn Leu Leu Ile Ile Leu Ala Thr Asn Phe Asp Ser His Leu
                        55
His Thr Pro Met Tyr Phe Phe Leu Ser Val Leu Ser Phe Asn Asp Ile
                                         75
65
Phe Leu Val Thr Cys Thr Ile Pro Lys Met Leu Val Asn Ile Gln Thr
                85
                                    90
Gly Asn Gln Asn Ile Thr Tyr Gly Gly Cys Leu Thr Gln Val Cys Phe
                                105
            100
Val Leu Val Ser Val Gly Met Glu Asn Cys Leu Leu Ala Ala Met Ala
        115
                            120
                                                 125
Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Arg Ile Ile
                        135
                                             140
Met Asn Pro Tyr Leu Cys Ile Leu Met Val Ala Phe Ser Met Ile Gly
145
                    150
                                        155
                                                             160
Ser Met Ala Asn Ala Leu Val Asn Gly Leu Met Val Leu His Leu Ser
                165
                                    170
                                                         175
Phe Cys Thr Glu Leu Ile Ile Pro His Phe Phe Cys Glu Leu Thr Gln
            180
                                185
                                                     190
Ile Thr Lys Leu Ala Cys Ser Asn Thr Leu Ile Asp Asn Ile Leu Ile
        195
                            200
                                                 205
Tyr Ile Ser Ser Cys Ile Phe Gly Gly Val Pro Leu Ser Gly Ile Ile
                        215
                                             220
Leu Ser Tyr Cys Gln Ile Ala Thr Thr Val Leu Arg Met Ser Ser Ser
                    230
                                         235
Glu Gly Arg Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val
                245
                                    250
Val Phe Leu Phe Tyr Gly Thr Gly Phe Gly Val Tyr Ile Ser Ser Thr
                                265
                                                     270
Ile Thr Glu Ser Ser Arg Lys Ser Ala Val Ala Ser Val Leu Tyr Ser
                            280
Val Val Pro Gln Met Ile Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg
                        295
                                            300
Asp Met Lys Glu Ala Leu Lys Lys Leu Ile Ser Arg Ile Leu Phe Pro
305
                    310
                                         315
Leu
```

```
<210> 1357
<211> 311
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<400> 1357

Met Gly Thr Phe Asn Ala Ser Leu Gly Lys Gly Phe Ile Leu Val Gly

1 5 10 15

Phe Ser Asp Phe Pro Gln Leu Glu Val Phe Leu Phe Val Phe Ile Leu
20 25 30

Val Phe Tyr Leu Leu Thr Leu Leu Gly Asn Thr Thr Ile Ile Ala Leu

<212> PRT

<213> Mus musculus

```
Ser Arg Leu Asp Val Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
                                        7.5
Leu Leu Ile Asn Leu Cys Gly Leu Asp Arg Thr Ile Ser Tyr Gly Gly
                                    90
Cys Val Ala Gln Leu Leu Ile Phe Leu Ala Leu Val Ser Thr Glu Cys
                                1.05
Leu Leu Leu Gly Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg
                            120
Pro Leu His Tyr Thr Thr Ile Met His Pro Gln Leu Cys Gln Gly Leu
                        135
                                            140
Ala Ile Ser Ser Trp Val Ser Gly Leu Val Asn Ser Val Ile Gln Thr
                    150
                                        155
Gly Leu Val Met Ala Met Pro Leu Cys Ser His Arg Leu Asn His Phe
                165
                                    170
Phe Cys Glu Met Pro Ile Phe Leu Lys Leu Ala Cys Glu Asp Thr Asn
                                185
                                                    190
Gly Thr Glu Val Lys Met Phe Val Ala Arg Thr Ile Ile Leu Ile Phe
                            200
                                                 205
Pro Ala Ala Leu Ile Leu Gly Ser Tyr Gly His Ile Ala Arg Ala Ile
                        215
                                            220
Leu Arg Ile Lys Ser Met Ala Gly Arg Arg Lys Ala Phe Gly Thr Cys
                    230
                                        235
Gly Ser His Leu Ile Val Val Ser Leu Phe Tyr Gly Ser Gly Ile Tyr
                245
                                    250
Thr Tyr Leu Gln Pro Ile His Arg Tyr Ser Glu Asn Glu Gly Lys Phe
                                265
                                                     270
Val Ala Val Phe Tyr Thr Ile Leu Thr Pro Ile Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu
                        295
Gly Lys Gly Thr Asp Leu Val
305
```

```
<210> 1358
```

<400> 1358

Met Gly Ser Phe Asn Thr Ser Phe Arg Gln Gly Phe Phe Leu Val Gly 10 Phe Ser Asp Phe Pro Gln Leu Glu Leu Leu Ser Val Leu Ile Ser Ile Phe Tyr Ser Leu Thr Leu Phe Gly Asn Ser Thr Ile Ile Ile Leu 35 Ser Gln Leu Asp Ala Arg Leu Gln Met Pro Met Tyr Phe Phe Leu Cys 60 His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Ile Val Pro Gln 70 Leu Leu Ile Asn Leu Gln Gly Tyr Asp Arg Thr Ile Ser Tyr Gly Gly 85 90 Cys Val Ala Gln Leu Phe Leu Phe Leu Ala Leu Ala Thr Thr Glu Ser 100 105 110 Val Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg 120 Pro Leu His Tyr Thr Thr Ile Met His Pro Val Leu Cys Leu Ser Leu

<211> 311

<212> PRT

<213> Mus musculus

```
130
                        135
                                             140
Ala Ile Val Ser Trp Val Gly Gly Phe Met Asn Ser Leu Ile Gln Thr
                    150
                                         155
Ser Leu Met Met Ala Val Pro Leu Cys Gly His Arg Leu Asn His Phe
                                    170
Phe Cys Glu Ile Pro Ser Leu Leu Lys Leu Ala Cys Glu Asp Thr Glu
                                185
                                                     190
Gly Thr Gly Ala Lys Met Phe Val Val Arg Val Val Phe Leu Ile Phe
                            200
Pro Ile Thr Leu Ile Leu Ser Ser Tyr Ala Asn Ile Ala Gln Ala Val
                        215
                                             220
Leu Lys Thr Lys Ser Met Ala Gly Cys Lys Lys Ala Leu Gly Thr Cys
                    230
                                         235
Gly Ser His Leu Val Val Ser Met Phe Tyr Gly Ala Ala Met Tyr
                                    250
Thr Tyr Leu Gln Pro Lys Gly Thr Tyr Ser Glu Ser Lys Gly Lys Phe
                                265
                                                     270
Val Ala Leu Phe Tyr Ile Ile Val Thr Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu
                        295
Gly Arg Ala Thr Asp Leu Gly
305
<210> 1359
<211> 311
<212> PRT
<213> Mus musculus
<400> 1359
Met Asp Val Asp Asn Gln Thr Arg Val Thr Lys Phe Ile Leu Val Gly
                                    10
Phe Pro Gly Ser Leu Ser Met Arg Ala Ala Val Phe Leu Met Phe Leu
                                25
Val Ala Tyr Ile Leu Thr Val Ala Glu Asn Val Ile Ile Ile Leu Leu
        35
                            40
Val Gln Gln Asn Arg Pro Leu His Lys Pro Met Tyr Phe Phe Leu Ala
                        55
                                             60
Asn Leu Ser Phe Leu Glu Thr Trp Tyr Ile Ser Val Thr Val Pro Lys
                                         75
Leu Leu Phe Ser Phe Trp Ser Met Ser Asn Ser Ile Ser Phe Thr His
                                    90
Cys Met Ile Gln Leu Tyr Phe Phe Ile Ala Leu Met Cys Thr Glu Cys
                                105
                                                     110
Val Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
                                                 125
Pro Leu His Tyr Pro Thr Ile Met Ser His Gly Leu Cys Phe Arg Leu
                                            140
Ala Leu Gly Ser Trp Val Ile Gly Phe Gly Ile Ser Leu Ala Lys Ile
                    150
                                         155
Tyr Phe Ile Ser Arg Leu Ser Phe Cys Gly Pro Asn Val Ile Asn His
                                    170
Phe Phe Cys Asp Ile Ser Pro Val Leu Asn Leu Ser Cys Thr Asp Met
            180
                                185
                                                     190
Ser Ile Ala Glu Leu Val Asp Phe Val Leu Ala Leu Val Ile Phe Leu
```

195 200 205 Phe Pro Leu Ser Ile Thr Val Leu Ser Tyr Gly Cys Ile Leu Ala Thr

220

```
Val Leu Arq Met Pro Thr Gly Lys Gln Lys Ala Phe Ser Thr Cys Ala
Ser His Leu Val Val Thr Ile Phe Tyr Ser Ala Thr Ile Phe Met
                                    250
Tyr Ala Arg Pro Arg Ala Ile His Ala Phe Asn Met Asn Lys Val Ile
Ser Ile Phe Tyr Ala Ile Val Thr Pro Ala Leu Asn Pro Phe Ile Tyr
                            280
Cys Leu Arg Asn Arg Glu Val Lys Glu Ala Leu Lys Lys Leu Ile Tyr
                        295
Cys Gln Val Ile Arg Ser Asp
<210> 1360
<211> 316
<212> PRT
<213> Mus musculus
<400> 1360
Met Glu Ala Thr Thr Cys Asn Gly Ser Val Asp Gly Ser Thr Val Phe
Tyr Leu Val Gly Ile Pro Ser Leu Pro Glu Pro Phe Tyr Leu Pro Val
                                25
Phe Phe Leu Phe Leu Phe Tyr Leu Leu Ile Leu Val Gly Asn Ala
                            40
Leu Ile Leu Val Ala Val Ala Glu Arg Ser Leu His Lys Pro Met
Tyr Phe Phe Leu Ile Asn Leu Ser Ala Leu Asp Ile Leu Phe Thr Thr
                                        75
Thr Thr Val Pro Lys Met Leu Ser Leu Leu Leu Gly Asp Arg Phe
                                    90
Leu Ser Phe Pro Ala Cys Leu Leu Gln Met Tyr Leu Phe Gln Ser Phe
           100
                                105
                                                    110
Thr Cys Ser Glu Ala Phe Ile Leu Val Val Met Ala Tyr Asp Arg Tyr
                            120
                                                125
Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val His Met Thr Pro Gln
                        135
                                            140
Thr Asn Thr Ala Leu Ala Ala Ser Ala Trp Ile Thr Ala Leu Leu Leu
                    150
                                        155
Pro Val Pro Ala Val Ile Lys Thr Ser Gln Met Val Tyr Asn Asp Ile
                                    170
                                                        175
Ala Tyr Ile Tyr His Cys Phe Cys Asp His Leu Ala Leu Val Gln Ser
           180
                                185
                                                    190
Ser Cys Ser Asp Thr Thr Pro Gln Thr Leu Met Gly Phe Cys Ile Ala
                            200
                                                205
Met Val Val Ser Phe Leu Pro Leu Leu Leu Val Leu Leu Ser Tyr Val
                        215
                                            220
Arg Ile Leu Thr Ser Val Leu Gln Ile Asn Ser Lys Glu Gly Arg Ser
                    230
                                        235
Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val Gly Thr Tyr
                                    250
Tyr Ser Ser Ile Ala Ile Ala Tyr Val Ala Tyr Arg Ala Asp Leu Pro
Leu Asp Phe His Ile Met Gly Asn Val Val Tyr Ser Ile Leu Thr Pro
                            280
Ile Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Ala
```

Ala Ile Thr Lys Ile Val Tyr Leu Lys Gly Met Met

305 310 315

```
<210> 1361
<211> 316
<212> PRT
<213> Mus musculus
<400> 1361
Met Glu Pro Trp Asn Ser Thr Leu Glu Ser Gly Phe Ile Leu Val Gly
                                     10
Ile Leu Asp Gly Ser Gly Ser Pro Glu Leu Leu Cys Ala Thr Val Thr
            20
                                 25
Thr Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Leu Leu Leu Leu Val
        35
                            40
Ile Thr Val Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Leu Arg
                        55
                                             60
Gln Leu Ser Leu Ile Asp Leu Leu Phe Thr Ser Val Val Thr Pro Asn
                    70
                                         75
Thr Val Val Asp Phe Leu Leu Arg Asp Asn Thr Ile Ser Phe Glu Gly
                                     90
Cys Ala Leu Gln Leu Phe Ser Ala Met Thr Leu Gly Gly Ala Glu Asp
                                 105
Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
                                                 125
Pro Leu Asn Tyr Met Ile Phe Met Ser Pro Lys Ala Cys Arg Leu Met
                        135
                                             140
Val Ala Ile Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Gly His Thr
                    150
                                         155
Val Tyr Thr Met His Phe Pro Phe Cys Met Ser Gln Glu Ile Arg His
                                     170
                                                         175
                165
Leu Leu Cys Glu Val Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr
                                                     190
            180
                                 185
Ser Gln Tyr Glu Leu Met Val Tyr Val Thr Gly Val Ile Phe Leu Leu
        195
                            200
                                                 205
Leu Pro Leu Ser Ala Ile Ile Thr Ser Tyr Ser Leu Ile Leu Phe Thr
                        215
Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                    230
                                         235
Cys Ser Ser His Leu Thr Val Val Gly Met Phe Tyr Gly Gly Ala Thr
                                     250
                                                         255
                245
Phe Met Tyr Val Leu Pro Ser Ser Phe His Ser Pro Lys Gln Asp Asn
Ile Ile Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Val Arg Arg Val
                        295
                                             300
Leu Gly Arg His Ile Leu Pro Ala His Ala Thr Val
                    310
<210> 1362
<211> 315
<212> PRT
<213> Mus musculus
<400> 1362
Met Trp Ile Asn Asn Gln Ser Ser Val Asp Asp Phe Ile Leu Leu Gly
                                     10
```

```
Phe Ser Asp Arg Pro Trp Leu Glu Thr Pro Leu Phe Val Ile Phe Leu
Val Ala Tyr Ile Phe Ala Leu Phe Gly Asn Ile Ser Ile Ile Leu Val
Ser Arg Leu Asp Pro Gln Leu Asp Ser Pro Met Tyr Phe Phe Val Ser
Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
                    70
Met Leu Val Asn Leu Arg Gly Pro Glu Lys Thr Ile Ser Tyr Gly Gly
                                    90
Cys Val Ala Gln Leu Tyr Ile Phe Leu Ala Leu Gly Ser Thr Glu Cys
Ile Leu Leu Ala Ile Met Ala Phe Asp Arg Phe Ala Ala Ile Cys Arg
                            120
Pro Leu His Tyr Pro Ile Ile Met Asn Gln Lys Arg Cys Ile His Met
                        135
Ala Thr Gly Thr Trp Ile Ser Gly Phe Ala Asn Ser Leu Val Gln Ser
                    150
Thr Leu Thr Val Val Ala Pro Arg Cys Gly Gln Arg Val Ile Asp His
                                    170
                165
Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ala Cys Thr Asp Thr
                                185
Ser Val Asn Glu Ala Glu Leu Asn Val Leu Gly Ala Leu Leu Leu Leu
        195
Val Pro Leu Ser Leu Ile Leu Gly Thr Tyr Val Phe Ile Ala Gln Ala
                        215
Val Leu Lys Leu Arg Ser Ala Glu Ser Arg Arg Lys Ala Phe Asn Thr
                    230
                                        235
Cys Ala Ser His Leu Leu Val Val Ser Leu Phe Tyr Phe Thr Ala Ile
Ser Met Tyr Val Gln Pro Pro Ser Ser Tyr Ser His Glu Arg Gly Lys
                                265
Ile Met Ala Leu Phe Tyr Gly Ile Val Thr Pro Thr Leu Asn Pro Phe
                            280
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Ala Ala Leu Arg Arg Ala
                        295
Leu Thr Lys Glu Phe Trp Val Lys Ala Arg Gln
```

```
<210> 1363
```

<400> 1363

 Met Ile His Ser Asn Ile Thr Pro Ile His Pro Ala Phe Phe Val Leu

 1
 5

 Val Gly Ile Pro Gly Leu Glu Ala Tyr His Thr Trp Leu Ser Ile Pro

 20
 25

 Leu Cys Leu Met Tyr Val Thr Ala Val Leu Gly Asn Ser Ile Leu Ile

 35
 40

 Met Val Ile Ile Thr Glu Arg Asn Leu His Glu Pro Met Tyr Phe Phe

 50
 60

 Leu Ser Met Leu Ala Ile Thr Asp Ile Leu Leu Ser Thr Thr Thr Val

 65
 70

 Pro Lys Ala Leu Thr Ile Phe Trp Leu His Ala His Asn Ile Ala Phe

 85

 Asp Ala Cys Val Thr Gln Val Phe Phe Val His Thr Met Phe Val Gly

<211> 322

<212> PRT

<213> Mus musculus

```
100
                                105
Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Phe Ile Ala Ile
                            120
Cys Ala Pro Leu Arg Tyr Ala Thr Val Leu Thr Trp Ser Thr Val Gly
                        135
Arg Ile Ala Leu Ala Ile Val Ile Arg Ser Ile Cys Ile Ile Phe Pro
                    150
                                        155
Val Ile Phe Leu Leu Lys Arg Leu Pro Phe Cys Arg Thr Asn Ile Val
                165
                                    170
Pro His Ser Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ala Cys Ala
           180
                                185
Asp Ile Thr Val Asn Ile Trp Tyr Gly Phe Ser Val Pro Ile Val Met
       195
                            200
Val Ile Val Asp Val Ile Leu Ile Ala Val Ser Tyr Ser Leu Ile Leu
                        215
Arg Ala Val Phe Arg Leu Pro Ser Gln Asp Ala Arg His Lys Ala Leu
                    230
                                        235
Ser Thr Cys Gly Ser His Leu Cys Val Ile Leu Met Phe Tyr Val Pro
                245
                                    250
Ser Phe Phe Thr Leu Leu Thr His Arg Phe Gly Arg Asn Ile Pro Arg
                                265
            260
His Val His Ile Leu Leu Ala Asn Leu Tyr Val Val Pro Pro Met
                            280
Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Gly
                        295
                                            300
Val Val His Trp Phe Leu Asp Ile Lys Thr Leu Cys Cys Ser Ser Pro
Leu Gly
```

<210> 1364

<211> 310

<212> PRT

<213> Mus musculus

<400> 1364

Met Ser Glu Ala Asn Ser Ser Ser Leu Thr Pro Glu Phe Phe Ile Leu 10 Asn Gly Ile Arg Gly Leu Glu Asp Ala His Val Trp Ile Ser Leu Pro 25 Phe Cys Phe Met Tyr Met Ile Ala Val Val Gly Asn Cys Gly Leu Ile 45 40 Tyr Leu Ile Gly His Glu Glu Ala Leu His Arg Pro Met Tyr Tyr Phe 55 Leu Thr Leu Leu Ser Phe Thr Asp Ile Thr Leu Cys Thr Thr Thr Val 70 75 Pro Asn Met Leu Cys Ile Phe Trp Phe Asn Leu Lys Lys Ile Gly Phe 85 90 Lys Ala Cys Leu Ala Gln Met Phe Phe Val His Thr Phe Thr Ala Thr 100 105 110 Glu Ser Gly Met Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile 115 120 125 Cys Tyr Pro Leu Arg Tyr Gly Thr Ile Leu Thr Asn Pro Val Ile Ala 135 140 Lys Ala Ser Leu Ala Thr Phe Leu Arg Ser Val Ala Phe Ile Leu Pro 150 155 Phe Thr Phe Leu Thr Lys Arg Leu Pro Tyr Cys Arg Gly Asn Leu Ile 170

```
Pro His Ala Tyr Cys Asp His Met Ser Val Ala Lys Ile Ser Cys Gly
            180
                                185
Asn Val Lys Ile Asn Ala Val Tyr Gly Leu Leu Val Ala Leu Val Val
        195
                            200
                                                205
Cys Ala Phe Asp Ile Phe Cys Ile Thr Val Ser Tyr Thr Met Ile Leu
                        215
                                            220
Arg Ala Val Met Asn Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe
                    230
Ser Thr Cys Thr Ser His Ile Cys Ala Ile Val Ile Thr Tyr Val Pro
                                    250
Ala Phe Phe Asn Phe Phe Thr His Arg Phe Gly Ala His Thr Ile Pro
                                265
His His Ile His Ile Ile Val Ala Asn Leu Tyr Leu Leu Leu Pro Ala
                            280
Thr Met Asn Pro Ile Val Tyr Gly Val Lys Thr Gln Ala Asp Ser Gly
                        295
                                            300
Glu Cys Asn Gln Ile Phe
```

<210> 1365

<211> 318 <212> PRT

<213> Mus musculus

<400> 1365

Met Ser Gly Ala Asn Ser Ser Ser Leu Thr Pro Glu Phe Phe Ile Leu Asn Gly Val Pro Gly Leu Glu Asp Ala His Val Trp Ile Ser Leu Pro Phe Cys Phe Met Tyr Met Ile Ala Val Val Gly Asn Cys Gly Leu Ile Tyr Leu Ile Gly His Glu Glu Ala Leu His Arg Pro Met Phe Tyr Phe 55 Leu Ala Leu Leu Ser Phe Thr Asp Val Thr Trp Cys Thr Thr Thr Val Pro Asn Met Leu Cys Ile Phe Trp Phe Asn Phe Lys Lys Ile Gly Phe 85 Asn Ser Cys Leu Ala Gln Met Phe Phe Val His Met Leu Thr Gly Met 105 110 Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile 115 120 125 Cys Asn Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asn Pro Val Ile Ala 135 140 Lys Ala Cys Leu Ala Thr Phe Leu Arg Ser Val Met Leu Ile Phe Pro 150 155 Phe Thr Leu Leu Thr Lys Arg Leu Pro Tyr Cys Arg Ser Ile Leu Ile 170 175 Pro His Thr Tyr Cys Asp His Met Ser Val Ala Lys Val Ser Cys Gly 180 185 190 Asn Ala Lys Val Asn Ala Ile Tyr Gly Leu Met Val Ala Leu Leu Ile 195 200 Gly Val Phe Asp Ile Cys Cys Ile Ser Val Ser Tyr Thr Met Ile Leu 215 220 Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe 230 235 Ser Thr Cys Thr Ser His Ile Cys Ala Ile Val Ile Thr Tyr Val Pro 250 Ala Phe Phe Thr Phe Phe Thr His Arg Phe Gly Gly His Thr Ile Pro

260 265 His His Val His Ile Ile Val Ala Asn Leu Tyr Leu Leu Pro Pro 285 280 Thr Met Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu 295 300 Ser Val Ile Lys Phe Leu Leu Gly Asp Lys Met Gly Phe Thr <210> 1366 <211> 316 <212> PRT <213> Mus musculus <400> 1366 Met Ile Lys Phe Asn Gly Ser Val Phe Met Pro Ser Val Leu Thr Leu Val Gly Ile Pro Gly Leu Glu Ser Val Gln Cys Trp Ile Gly Ile Pro Phe Cys Val Met Tyr Ile Ile Ala Met Ile Gly Asn Ser Leu Ile Leu 40 Val Ile Ile Lys Ser Glu Lys Ser Leu His Ile Pro Met Tyr Ile Phe 55 Leu Ala Ile Leu Ala Val Thr Asp Ile Ala Leu Ser Thr Cys Ile Leu 70 75 Pro Lys Met Leu Gly Ile Phe Trp Phe His Met Pro Gln Ile Ser Phe 85 90 Asp Ala Cys Leu Gln Met Glu Leu Ile His Ser Phe Gln Ala Thr 105 110 100 Glu Ser Gly Ile Leu Leu Ala Met Ala Leu Asp Arg Tyr Val Ala Ile 120 125 115 Cys Asn Pro Leu Arg His Ala Thr Ile Phe Ser Pro Gln Leu Thr Thr 135 140 Cys Leu Gly Ala Gly Ala Leu Leu Arg Ser Leu Ile Thr Thr Phe Pro 150 155 Leu Ile Leu Leu Ile Lys Phe Cys Leu Lys Tyr Phe Arg Thr Thr Ile 170 165 Ile Ser His Ser Tyr Cys Glu His Met Ala Ile Val Lys Leu Ala Ala 180 185 190 Gln Asp Ile Arg Ile Asn Lys Ile Cys Gly Leu Leu Val Ala Phe Ala 195 200 205 Ile Leu Gly Phe Asp Ile Val Phe Ile Thr Phe Ser Tyr Val Arg Ile 215 220 Phe Ile Thr Val Phe Gln Leu Pro Gln Lys Glu Ala Arg Phe Lys Ala 230 235 Phe Asn Thr Cys Ile Ala His Ile Cys Val Phe Leu Gln Phe Tyr Leu 250 245 Leu Ala Phe Phe Ser Phe Phe Thr His Arg Phe Gly Ala His Ile Pro 265 Pro Tyr Val His Ile Leu Leu Ser Asp Leu Tyr Leu Leu Val Pro Pro 280 285 Phe Leu Asn Pro Ile Val Tyr Gly Ile Lys Thr Lys Gln Ile Arg Asp 295 300 Gln Val Leu Lys Met Phe Phe Ser Lys Lys Pro Leu 310

Val Val Ala Leu Leu Gly Asn Ala Ala Leu Ile Leu Ile Ile Gly Thr

Glu Ser Val Leu His Thr Pro Met Tyr Leu Phe Leu Cys Leu Leu Ser

```
Leu Thr Asp Leu Ala Leu Ser Ser Thr Thr Val Pro Lys Met Leu Ala
                    70
                                        75
Ile Leu Trp Leu His Ser Asn Glu Ile Ser Phe Gly Gly Cys Leu Ala
                85
                                    90
Gln Met Phe Cys Val His Ser Ile Tyr Ala Leu Glu Ser Ser Val Leu
            100
                                105
                                                     110
Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg
                            120
                                            125
Tyr Thr Thr Ile Leu Asn His Thr Val Ile Ala Gln Ile Ile Phe Ala
                        135
                                            140
Gly Ile Val Arg Ser Val Ala Ile Val Ser Pro Phe Ile Phe Leu Leu
                    150
                                        155
Arg Arg Leu Pro Tyr Cys Gly His Arg Val Met Thr His Thr Tyr Cys
                165
                                    170
                                                         175
Glu His Met Gly Ile Ala Arg Leu Ala Cys Ala Asn Ile Thr Val Asn
                                185
                                                     190
Ile Val Tyr Gly Leu Thr Val Ala Leu Leu Ala Met Gly Leu Asp Ser
                            200
                                                 205
        195
Ile Leu Ile Ala Ile Ser Tyr Gly Phe Ile Leu Arg Ala Val Phe Arg
                        215
                                             220
Leu Pro Ser Arg Asp Ala Gln His Lys Ala Leu Ser Thr Cys Gly Ser
                    230
                                         235
His Leu Gly Val Ile Leu Val Phe Tyr Ile Pro Ala Phe Phe Ser Phe
                                    250
Leu Thr His Arg Phe Gly His Asn Arg Val Pro Lys His Val His Ile
                                265
                                                     270
Phe Leu Ala Asn Leu Tyr Val Leu Val Pro Pro Val Leu Asn Pro Ile
                            280
Ile Tyr Gly Ala Arg Thr Lys Glu Ile Arg Ser Arg Leu Leu Lys Leu
                        295
                                             300
Leu His Leu Gly Lys Asp Leu Val
                    310
<210> 1369
<211> 312
<212> PRT
<213> Mus musculus
<400> 1369
Met Val Met His Asn Val Ser Ser Tyr Asn Thr Gly Pro Phe Thr Leu
                                     10
Ser Gly Ile Pro Gly Leu Glu Gln Tyr His Val Trp Ile Ser Ile Pro
                                 25
Phe Cys Phe Ile Tyr Leu Val Ala Ile Leu Gly Asn Ser Ile Leu Leu
```

Tyr Leu Ile Ala Val Glu His Ser Leu His Ser Pro Met Phe Phe Phe 55 . Leu Ser Met Leu Ala Met Thr Asp Leu Ile Leu Ser Thr Thr Cys Val 70 75 Pro Lys Thr Leu Ser Ile Phe Trp Phe Gly Pro Gln Glu Ile Ser Phe 90 Pro Gly Cys Leu Thr Gln Leu Phe Phe Leu His Tyr Ser Phe Val Leu 100 105 110 Asp Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 120 125 Cys Ser Pro Leu Arg Tyr Thr Thr Ile Leu Thr Pro Lys Thr Ile Val 130 135 140

```
Lys Ile Ala Val Gly Ile Ser Phe Arg Ser Phe Cys Val Phe Val Pro
                    150
                                        155
Cys Val Phe Leu Val Asn Arg Leu Pro Phe Cys Arg Thr His Ile Ile
                165
                                    170
Ala His Thr Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ala Cys Ala
            180
                                185
Asp Ile Ser Ile Asn Ile Trp Tyr Gly Phe Cys Val Pro Ile Met Thr
                            200
                                                 205
Val Ile Ile Asp Val Ile Leu Ile Ala Ile Ser Tyr Thr Leu Ile Leu
                        215
                                            220
Cys Ala Val Phe Arg Leu Pro Ser Arg Asp Ala Arg Gln Lys Ala Leu
                    230
                                        235
Ser Thr Cys Gly Ser His Val Cys Val Ile Leu Met Phe Tyr Ile Pro
                245
                                    250
Ala Phe Phe Ser Ile Leu Ala His Arg Phe Gly Arg Asn Val Pro Arg
            260
                                265
                                                     270
Thr Phe His Ile Met Phe Ala Asn Leu Tyr Val Ile Ile Pro Pro Ala
                            280
Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Asp Lys
                        295
Ala Ile Leu Leu Leu Phe Pro Lys
                    310
```

<210> 1370 <211> 319 <212> PRT

<213> Mus musculus

<400> 1370

Met Met Tyr Ser Leu Met Leu Ala Ser Arg Asn Ser Ser Ser His Ser Thr Phe Phe Ile Leu Leu Gly Ile Pro Gly Leu Glu Asn Tyr Gln Phe Trp Val Ala Phe Pro Phe Cys Val Met Tyr Ile Val Ala Val Thr Gly Asn Ile Thr Ile Leu His Ile Ile Arg Ile Asp His Thr Leu His Glu Pro Met Tyr Leu Phe Leu Ala Met Leu Ala Thr Thr Asp Leu Val Leu Ser Ser Ser Thr Gln Pro Lys Met Leu Ala Ile Leu Trp Phe His Asp 90 His Lys Ile Glu Tyr His Ala Cys Leu Ile Gln Val Phe Phe Ile His 105 Ala Phe Ser Ser Val Glu Ser Gly Val Leu Met Thr Met Ala Leu Asp 120 Arg Tyr Val Ala Ile Cys Phe Pro Leu Arg His Ser Ser Ile Leu Thr Thr Ser Ala Val Ile Lys Leu Gly Ala Val Val Met Val Arg Gly Leu 155 Leu Trp Val Ser Pro Phe Cys Phe Met Val Ser Arg Met Pro Phe Cys 170 Pro Asn Lys Ile Ile Pro Gln Ser Tyr Cys Glu His Met Ala Val Leu 185 190 Lys Leu Val Cys Ala Asp Thr Arg Val Asn Arg Gly Tyr Gly Leu Phe 200 205 Val Ala Phe Ser Val Val Gly Phe Asp Ile Ile Val Ile Ser Val Ser 215 Tyr Val Met Ile Leu Arq Ala Val Leu Arg Leu Pro Ser Gly Glu Ala

```
225
                    230
                                        235
Arg Leu Lys Ala Phe Gly Thr Cys Ala Ser His Ile Gly Val Ile Leu
                245
                                    250
Thr Leu Tyr Ile Pro Ala Leu Phe Thr Phe Leu Thr His Arg Phe Gly
                                265
                                                     270
His His Val Pro Arg Val Val His Ile Met Phe Ala Asn Val Tyr Leu
                            280
Leu Val Pro Pro Met Leu Asn Pro Ile Ile Tyr Gly Val Arg Thr Lys
                        295
                                            300
Gln Ile Arg Asp Arg Val Thr Arg Gly Phe Cys Val Lys Gly Ser
<210> 1371
<211> 319
<212> PRT
<213> Mus musculus
<400> 1371
Met Met His Ser Leu Met Leu Ala Ser Arg Asn Asn Ser Ser His Ser
Thr Phe Phe Ile Leu Leu Gly Ile Pro Gly Leu Glu Asn Tyr Gln Phe
                                25
Trp Val Ala Phe Pro Phe Cys Val Met Tyr Ile Val Ala Val Thr Gly
                            40
Asn Ile Thr Ile Leu His Ile Ile Arg Ile Asp His Thr Leu His Glu
Pro Met Tyr Leu Phe Leu Ala Met Leu Ala Thr Thr Asp Leu Val Leu
                                        75
Ser Ser Ser Thr Gln Pro Lys Met Leu Ala Ile Leu Trp Phe His Asp
                                    90
His Lys Ile Glu Tyr His Ala Cys Leu Ile Gln Val Phe Phe Ile His
            100
                                105
                                                     110
Ala Phe Ser Ser Val Glu Ser Gly Val Leu Met Asp Met Ala Leu Asp
       115
                            120
                                                125
Arg Tyr Val Ala Ile Cys Phe Pro Leu Arg His Ser Ser Ile Leu Thr
                        135
                                            140
Thr Ser Val Val Ile Lys Leu Gly Val Ala Val Met Val Arg Gly Leu
                    150
                                        155
Leu Trp Val Ser Pro Phe Cys Phe Met Val Ser Arg Met Pro Phe Cys
                165
                                    170
Pro Asn Lys Val Ile Pro Gln Ser Tyr Cys Glu His Met Ala Val Leu
            180
                                185
Lys Leu Val Cys Ala Asp Thr Arg Val Asn Arg Gly Tyr Gly Leu Phe
       195
                            200
                                                205
Val Ala Phe Ser Val Ala Val Phe Asp Leu Ala Val Ile Ser Val Ser
                        215
                                            220
Tyr Ala Met Ile Leu Arg Ala Val Leu Arg Leu Pro Ser Gly Glu Ala
                    230
                                        235
Arg Leu Lys Ala Phe Gly Thr Cys Ala Ser His Ile Gly Val Ile Leu
                245
                                    250
Thr Leu Tyr Ile Pro Ala Leu Phe Thr Phe Leu Thr His Arg Phe Gly
                                265
His His Val Pro Arg Ile Val His Ile Met Phe Ala Asn Val Tyr Leu
                            280
Leu Val Pro Pro Met Leu Asn Pro Ile Ile Tyr Gly Val Arg Thr Lys
                        295
                                            300
Gln Ile Arg Asp Arg Val Thr Gln Ala Phe Cys Gly Lys Gly Ser
```

```
<210> 1372
<211> 317
<212> PRT
<213> Mus musculus
<400> 1372
Met Ile Leu Pro Asn Asp Thr Gln Phe His Pro Ser Thr Phe Leu Leu
Leu Gly Ile Pro Gly Leu Glu Ser Leu His Ile Trp Ile Gly Phe Pro
                                25
Phe Cys Val Val Tyr Met Ile Ala Leu Leu Gly Asn Leu Thr Ile Leu
Phe Val Ile Lys Thr Glu Ser Ser Leu His Gln Pro Met Phe Tyr Phe
Leu Ala Met Leu Ala Thr Ile Asp Leu Gly Leu Ser Thr Ala Thr Ile
Pro Lys Met Leu Gly Ile Phe Trp Ile Asn Leu Arg Glu Ile Leu Phe
Glu Asp Cys Leu Ile Gln Met Phe Phe Ile His Lys Phe Thr Leu Met
                                105
Glu Ser Thr Val Leu Leu Ala Met Ala Tyr Asp His Tyr Val Ala Ile
                            120
                                                 125
Cys Ile Pro Leu Arg Tyr Ser Thr Ile Leu Thr Asn Lys Val Val Ser
                        135
                                            140
Met Ile Gly Ile Ala Val Leu Val Arg Ala Ile Ile Phe Val Ile Pro
                    150
Phe Ile Phe Leu Ile Leu Arg Leu Pro Phe Cys Gly His His Ile Ile
                165
                                    170
Pro His Thr Tyr Cys Glu His Met Gly Leu Ala Arg Leu Ser Cys Ala
            180
                                185
                                                     190
Ser Val Lys Ala Asn Val Ile Tyr Gly Leu Cys Ala Ile Cys Asn Leu
        195
                            200
Leu Phe Asp Ile Val Ala Ile Val Leu Ser Tyr Ile Gln Ile Leu Arg
                        215
                                            220
Val Val Phe His Leu Pro Ser Arg Glu Ala Arg Leu Lys Ser Leu Asn
                    230
                                        235
Thr Cys Gly Ser His Val Cys Val Ile Leu Ala Phe Tyr Thr Pro Ala
                245
                                    250
Leu Phe Ser Phe Met Thr His Arg Phe Gly Arg Asn Val Pro Arg Tyr
                                265
                                                     270
Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Pro Pro Met Leu
                            280
                                                 285
Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Tyr Asp Arg Val
                        295
Lys Lys Ile Leu Leu Gln Val Arg Gly Lys Glu Lys Glu
<210> 1373
<211> 317
<212> PRT
<213> Mus musculus
<400> 1373
Met Ser Cys Ala Pro Asn Ala Ser His Ser Pro Ile Phe Leu Leu Leu
                                    10
```

Gly Phe Ser Arg Ala Gly Val Pro His Thr Phe Leu Phe Leu Leu Phe

```
Leu Phe Ile Tyr Leu Thr Thr Ile Leu Gly Asn Val Thr Leu Val Leu
                            40
Leu Ile Ser Trp Asp Ser Arg Leu His Ser Pro Met Tyr Tyr Leu Leu
                        55
Arg Gly Leu Ser Met Ile Asp Leu Gly Leu Ser Thr Val Thr Leu Pro
                    70
                                        75
Gln Leu Leu Val His Leu Ser Ser Asp Ser Pro Ala Ile Pro Ala Ala
                                    90
Arg Cys Leu Thr Gln Phe Phe Phe Phe Tyr Ala Phe Gly Val Thr Asp
                                105
            100
Thr Leu Val Ile Ala Val Met Ala Leu Asp Arg Tyr Val Ala Ile Cys
                            120
Asp Pro Leu His Tyr Ala Leu Val Met Asn Arg Gln Ile Cys Ala Arg
                        135
                                            140
Leu Leu Ala Leu Ser Trp Val Val Ser Ile Val His Thr Met Leu His
                    150
                                         155
Val Gly Leu Ile Leu Pro Leu Cys Trp Ala Gly Asp Ala Gly Gly Asn
                165
                                    170
Val Lys Leu Pro His Phe Phe Cys Asp His Arg Pro Leu Leu Arg Ala
            180
                                185
                                                     190
Ser Cys Ser Asp Thr His Ser Asn Glu Leu Ala Ile Phe Leu Glu Gly
        195
                            200
Gly Phe Leu Met Leu Gly Pro Cys Ser Leu Ile Val Leu Ser Tyr Ala
                        215
                                            220
Arg Ile Gly Ile Thr Ile Leu Arg Leu Pro Ser Ala Ala Gly Arg Arg
                    230
                                         235
Arg Ala Val Ser Thr Cys Gly Ser His Leu Thr Met Val Gly Phe Leu
                                    250
Tyr Gly Thr Ile Ile Trp Val Tyr Phe Gln Pro Pro Ser Gln Asn Ser
                                265
Arg Asn Gln Asp Met Val Ala Ser Val Met Tyr Thr Ala Ile Thr Pro
                            280
Leu Ala Asn Pro Phe Val Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly
                        295
                                            300
Ala Leu His Arg Leu Leu Arg Gln Gly Arg Val Asp Ser
                    310
<210> 1374
<211> 322
<212> PRT
<213> Mus musculus
<400> 1374
Met Leu Leu Asn Gln Thr Glu Val Thr Pro Val Ser Phe Ile Leu
                                    10
Asn Gly Ile Pro Gly Leu Glu Glu Met His Ile Trp Ile Ser Phe Pro
Phe Cys Ser Met Tyr Val Ile Ala Val Val Gly Asn Cys Gly Leu Leu
                            40
Tyr Leu Ile Phe Phe Glu Asp Ser Leu His Arg Ser Met Tyr Tyr Phe
                        55
```

Leu Ala Met Leu Ser Leu Thr Asp Leu Val Met Cys Ser Ala Ser Ile

Pro Lys Thr Leu Cys Ile Phe Trp Phe Tyr Ile Lys Glu Ile Ser Phe

Thr Asp Cys Leu Val Gln Met Phe Phe Ile His Thr Phe Thr Ala Met

90

8.5

```
Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile
                            120
Cys Tyr Pro Leu His Tyr Ser Thr Ile Leu Thr Asn Pro Val Ile Ala
                        135
Lys Ala Gly Leu Ala Thr Phe Leu Arg Ala Val Val Leu Ile Ile Pro
                    150
                                        155
Leu Ile Phe Ile Thr Lys His Leu Pro Phe Cys Arg Ser Asn Ile Leu
                165
                                    170
Ile His His Thr Tyr Cys Asp Gln Leu Ser Val Ala Lys Val Ser Cys
           180
                                185
Gly Asn Ile Lys Val Asn Ile Val Tyr Gly Leu Met Ile Ala Leu Phe
                            200
Ile Gly Gly Phe Asp Ile Leu Cys Ile Thr Val Ser Tyr Thr Met Ile
                        215
Leu Lys Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg Gln Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ala His Ile Cys Ala Ile Val Phe Ser Tyr Ser
                245
                                    250
Pro Ala Phe Phe Cys Phe Phe Ser His Arg Phe Gly Gly His Ile Ile
                                265
Pro Pro Ser Cys Leu Ile Ile Val Ala Asn Leu Tyr Leu Leu Pro
                            280
Pro Thr Met Asn Pro Val Val Tyr Gly Val Lys Thr Lys Gln Ile Arg
                       295
Asp Cys Val Ile Arg Ile Phe Ser Gly Ser Lys Asp Ile Lys Ser His
305
                    310
Ser Ile
```

<210> 1375

<211> 323

<212> PRT

<213> Mus musculus

<400> 1375

Met Val Met Ser Val Gln Asn Ser Thr Asp Leu Thr Pro Ala Ser Phe 10 Val Leu Asn Gly Ile Pro Gly Leu Glu Asp Met His Ile Trp Ile Ser 25 Phe Pro Phe Cys Ser Met Tyr Ala Val Ala Met Met Gly Asn Cys Gly 40 Leu Leu Tyr Leu Ile Phe Phe Glu Asp Ser Leu His Arg Pro Met Tyr 55 Tyr Phe Leu Ala Met Leu Ser Leu Thr Asp Leu Val Met Cys Ser Ser 75 Thr Ile Pro Lys Thr Leu Cys Ile Phe Trp Phe His Leu Lys Glu Ile 90 Gly Phe Asp Asp Cys Leu Val Gln Met Phe Phe Ile His Thr Phe Thr 100 105 110 Gly Met Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val 120 125 Ala Ile Cys Tyr Pro Leu Arg Tyr Ser Thr Ile Leu Thr Asn Pro Ile 135 140 Ile Ala Lys Ile Gly Leu Ala Thr Phe Leu Arg Gly Val Leu Leu Ile 150 155 Ile Pro Phe Thr Phe Leu Thr Lys Arg Leu Pro Tyr Cys Arg Gly Asn 170 Ile Ile Asn His Thr Tyr Cys Asp His Met Ser Val Ala Lys Leu Ser

```
180
                                185
Cys Gly Asn Val Lys Val Asn Ala Ile Tyr Gly Leu Met Val Ala Leu
                            200
Leu Ile Gly Gly Phe Asp Ile Leu Cys Ile Thr Ile Ser Tyr Thr Met
                        215
Ile Leu Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg Gln Lys
                    230
                                        235
Ala Phe Ser Thr Cys Thr Ala His Ile Cys Ala Ile Val Phe Ser Tyr
                                    250
Ser Pro Ala Phe Phe Ser Phe Phe Ser His Arg Phe Gly Gly His Thr
                                                     270
                                265
Ile Pro Pro Ser Cys His Ile Ile Val Ala Asn Ile Tyr Leu Leu Leu
                            280
Pro Pro Thr Met Asn Pro Val Val Tyr Gly Val Lys Thr Lys Gln Ile
                        295
Arg Asp Cys Val Ile Arg Ile Leu Ser Gly Ser Lys Asp Ser Lys Ala
                    310
His Gly Ile
```

<210> 1376

<211> 318

<212> PRT

<213> Mus musculus

<400> 1376

Met Pro Ile Met Ala Thr Phe Asn Leu Ser Ser Phe Asn Pro Gly Phe 10 Phe Ile Leu Leu Gly Ile Pro Gly Leu Glu Gln Phe His Val Trp Ile 25 Gly Ile Pro Phe Phe Ile Ile Tyr Leu Val Ala Phe Ala Gly Asn Ser 40 45 Ile Leu Leu Tyr Leu Ile Phe Met Glu Arg Ser Leu His Glu Pro Met 55 Phe Phe Leu Ser Leu Leu Asp Gly Thr Asp Leu Ile Leu Cys Asn 70 75 Thr Cys Val Pro Lys Thr Phe Ser Ile Phe Trp Leu Gly Pro Gln His 85 90 Ile Thr Phe Pro Gly Cys Leu Thr Gln Met Phe Phe Leu His Phe Ser 100 105 110 Phe Ala Met Asp Ser Ala Ile Leu Leu Ser Met Ala Phe Asp Arg Tyr 120 115 125 Val Ala Ile Cys Phe Pro Leu Arg Tyr Thr Thr Ile Leu Thr His Gln 135 140 Ile Val Ile Lys Ile Val Val Ala Ile Ile Ser Arg Ser Phe Cys Ile 150 155 Ile Phe Pro Cys Val Phe Leu Leu Lys Arg Leu Pro Phe Cys Arg Glu 170 Leu Val Ile Pro His Thr Tyr Cys Glu His Ile Gly Ile Ala Arg Leu 180 185 190 Ala Cys Ala Asp Ile Ser Ile Asn Ile Trp Tyr Gly Phe Ala Val Pro 200 Ile Met Thr Val Met Ser Asp Leu Ile Leu Ile Gly Ile Ser Tyr Thr 215 220 Val Ile Leu Arg Ala Val Phe Asn Leu Pro Ser Gln Asp Ala Arg Lys 235 230 Lys Ala Leu Ser Thr Cys Gly Ser His Val Cys Val Ile Leu Ile Phe 250

Tyr Thr Pro Ala Ile Phe Ser Val Leu Val His Arg Phe Gly His Asn Ile Pro His Ser Phe His Ile Leu Phe Ala Asn Leu Tyr Val Ser Ile Pro Pro Ala Ile Asn Pro Val Ile Tyr Gly Val Lys Thr Lys Gln Ile 295 Arg Asp Lys Ile Asn Leu Leu Phe Phe Pro Lys Asp Asn His 310

<210> 1377 <211> 318 <212> PRT

<213> Mus musculus

<400> 1377

Met Thr Met Ser Ser Asn His Thr Asn Leu Arg Asp Ile Trp Tyr Thr Met Ile Gly Ile Pro Gly Leu Glu Asp Ala His Val Trp Leu Ser Ile 25 Pro Ile Cys Ser Met Tyr Ile Val Ala Leu Ile Gly Asn Thr Leu Leu 40 Ile Phe Leu Ile Phe Thr Glu His Ser Leu His Glu Pro Met Tyr Leu Phe Leu Ser Met Leu Ala Leu Ala Asp Ile Ile Leu Ser Thr Val Thr Thr Pro Lys Val Leu Ala Ile Phe Trp Phe Gln Ala Gly Gly Ile Ser 90 Phe Thr Ser Cys Val Ser Gln Met Phe Phe Leu His Phe Met Phe Val 100 105 110 Thr Glu Ser Ala Ile Leu Leu Ala Met Ala Ile Asp Arg Tyr Ile Ala 120 125 Ile Cys Phe Pro Leu Arg Tyr Thr Thr Ile Leu Thr Pro Ser Val Ile 135 140 Cys Arg Met Gly Ile Ala Ser Val Thr Arg Ser Phe Leu Ile Ile Phe 150 155 Pro Leu Val Phe Leu Val Tyr Arg Leu Asn Tyr Cys Gly Arg Asn Ile 170 165 Ile Arg His Ser Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys 180 185 190 Asp Ser Ile Lys Val Asn Ile Tyr Tyr Gly Met Thr Val Pro Leu Phe 200 Ser Ile Gly Leu Asp Ile Met Leu Ile Ile Ile Ser Tyr Thr Leu Ile 215 220 Leu His Thr Val Phe Arg Ile Pro Ser Gln Asn Ala Arg Arg Lys Ala 230 235 Leu Gly Thr Cys Gly Ser His Val Cys Val Ile Leu Leu Phe Tyr Thr 245 250 Pro Ser Leu Phe Thr Phe Phe Ala His Arg Phe Gly Gly His Thr Ile 265 270 Pro Arg His Met His Ile Leu Phe Ala Asn Leu Tyr Val Val Pro 280 Pro Ala Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln Ile Gln 295 Asp Arg Phe Phe Gln Leu Phe Ser Phe Thr Lys Ala Cys Phe

```
<211> 314
<212> PRT
<213> Mus musculus
<400> 1378
Met Pro Ser Cys Asn Asn Ser Ile Pro Gln Pro Leu Ile Phe Ile Leu
1
                                    10
Ala Gly Ile Pro Gly Leu Glu Ser Ser His Gly Trp Phe Ser Ile Ser
            20:
                                25
Phe Phe Leu Ile Phe Val Val Thr Ile Ile Gly Asn Val Thr Ile Leu
                            40
His Ile Ile Trp Ile Glu Lys Thr Leu His Glu Pro Met Phe Leu Leu
                        55
Leu Ala Thr Leu Ser Val Val Asp Leu Cys Leu Val Thr Val Thr Val
                                        75
Pro Arg Met Leu Gly Ile Phe Trp Leu Asn Ala Lys Glu Ile Ser Leu
                85
                                    90
Glu Ala Cys Leu Thr Gln Met Phe Phe Ile Pro Ser Phe Tyr Val Met
            100
                                105
                                                     110
Glu Ser Gly Ile Leu Leu Ala Met Ala Phe Asp Arg Phe Ala Ala Ile
        115
                            120
                                                125
Trp Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Asp Ser Asn Met Leu Val
                        135
                                            140
Lys Met Ala Leu Ala Ile Leu Ala Arg Ala Val Ala Val Thr Pro
145
                    150
                                        155
Ala Pro Ile Leu Thr Lys Arg Leu Glu Arg Phe Gln Thr Gln Val Ile
                165
                                    170
Ser Tyr Ser Tyr Cys Ala Tyr Met Ala Val Val Met Ile Ala Cys Gly
            180
                                185
                                                     190
Asp Ile Ser Asn His Ile Val Tyr Gly Leu Met Val Ile Val Ala Ser
                            200
        195
                                                205
Val Gly Ile Asp Leu Phe Leu Val Ile Leu Ser Tyr Thr Leu Ile Leu
                                            220
                        215
Arg Ala Val Phe His Ile Pro Ser Trp Gln Ala Arg Ser Lys Ala Leu
                    230
                                        235
Ser Thr Cys Gly Ser His Leu Cys Val Ile Gly Leu Phe Tyr Ser Pro
                245
                                    250
Val Val Phe Ser Val Leu Ser Gln Ile Leu Gly Tyr His Met Ala Pro
            260
                                265
                                                     270
Tyr Leu Gln Ile Ile Ile Asp Asn Leu Tyr Phe Leu Val Pro Pro Met
                            280
                                                285
Val Asn Pro Leu Ile Tyr Ala Val Arg Thr Lys Gln Ile Arg Glu Arg
                        295
Val Leu Arg Ile Leu Asn Cys Glu Arg Lys
                    310
<210> 1379
<211> 319
<212> PRT
<213> Mus musculus
<400> 1379
Met Ile Arg Arg Gln His Met Glu Ala Gln Ser Asn Thr Ser Ser Ile
                                    10
Leu Ala Pro Asp Phe Leu Leu Ile Cys Phe Pro Asn Tyr Gln Thr Trp
            20
                                25
Gln His Trp Leu Ser Leu Pro Leu Ser Leu Leu Phe Leu Leu Ala Met
```

```
Gly Ala Asn Ala Thr Leu Leu Ile Thr Ile Arg Met Glu Ala Ser Leu
His Glu Pro Met Tyr Tyr Leu Leu Ser Leu Leu Ser Leu Leu Asp Ile
                    70
Val Leu Cys Leu Thr Val Ile Pro Lys Val Leu Ala Ile Phe Trp Phe
Asp Asn Lys Ser Ile Gly Phe Ser Ser Cys Phe Leu Gln Met Phe Val
Met Asn Ser Phe Leu Thr Met Glu Ser Cys Thr Phe Met Val Met Ala
       115
                            120
Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Gln Tyr Pro Ser Ile
                        135
Ile Thr Asp Gln Phe Val Val Arg Ala Ile Phe Val Ala Arg
                    150
                                        155
Asn Gly Ile Leu Thr Met Pro Ile Pro Ile Leu Ser Ser Gln Leu Arg
                165
                                    170
Tyr Cys Ala Arg Ile Ile Arg Asn Cys Ile Cys Thr Asn Met Ser Val
           180
                                185
Ser Lys Leu Ser Cys Asp Asp Ile Thr Phe Asn Lys Leu Tyr Gln Phe
                            200
Val Ile Gly Trp Thr Leu Leu Gly Ser Asp Leu Ile Leu Ile Val Leu
                        215
Ser Tyr Ser Phe Ile Leu Lys Ala Val Leu Arg Ile Lys Ala Glu Gly
                    230
                                        235
Ala Val Ala Lys Ala Leu Ser Thr Cys Gly Ser His Phe Ile Leu Ile
                                    250
                245
Leu Phe Phe Ser Thr Val Leu Leu Val Leu Val Ile Thr Asn Leu Ala
                                265
Arg Glu Arg Ile Pro Pro Asp Val Pro Ile Leu Leu Asn Ile Leu His
                            280
His Leu Ile Pro Pro Ala Leu Asn Pro Ile Val Tyr Gly Val Arg Thr
                       295
Arg Glu Ile Lys Gln Gly Ile Arg Asn Leu Leu Arg Arg Arg Leu
```

```
<210> 1380
```

<400> 1380

 Met
 Thr
 Ala
 His
 Lys
 Asn
 Asp
 Thr
 Asn
 Pro
 Thr
 Gly
 Val
 Ser
 Asp
 Phe

 Leu
 Leu
 Asn
 Cys
 Phe
 Val
 Arg
 Ser
 Pro
 Ser
 Trp
 Gln
 Leu
 Trp
 Leu
 Ser
 Asp
 Trp
 Gln
 Leu
 Trp
 Leu
 Ser
 Asp
 Asp

<211> 315

<212> PRT

<213> Mus musculus

```
130
                        135
Val Val Lys Ala Ala Thr Phe Ile Leu Val Arg Asn Val Leu Ile Thr
                    150
                                        155
Leu Pro Ile Pro Ile Leu Ser Ala Arg Leu His Tyr Cys Gly Arg Asn
                                    170
                                                         175
Val Ile Glu Asn Cys Ile Cys Ala Asn Met Ser Val Ser Arg Leu Ser
                                185
                                                     190
Cys Asn Asp Val Asn Val Asn Arg Leu Tyr Gln Phe Ala Ile Gly Trp
        195
                            200
                                                 205
Thr Leu Leu Gly Ser Asp Leu Phe Leu Ile Phe Leu Ser Tyr Thr Leu
                        215
Ile Leu Arg Ala Val Leu Arg Leu Lys Ala Glu Gly Ala Val Ala Lys
                    230
                                         235
                                                             240
Ala Leu Ser Thr Cys Gly Ser His Phe Ile Leu Ile Leu Phe Phe Ser
                245
                                     250
Thr Ile Leu Leu Val Phe Ile Leu Thr His Val Ala Lys Arg Lys Val
                                265
                                                     270
Ser Ser Asp Val Pro Ile Leu Leu Asn Val Leu His His Val Ile Pro
        275
                            280
Ala Ala Leu Asn Pro Ile Val Tyr Gly Val Arg Thr Gln Glu Ile Lys
                        295
                                             300
Gln Gly Ile Lys Lys Leu Leu Lys Lys Gly Trp
                    310
<210> 1381
<211> 317
<212> PRT
<213> Mus musculus
<400> 1381
Met Leu Ile Ser Asn Asn Ser Tyr Glu Ala Pro Gln Ser Phe Ile Leu
Asn Gly Ile Pro Gly Leu Glu Ala Val His Ile Trp Ile Ser Leu Pro
Leu Cys Thr Met Tyr Ile Ile Ser Leu Val Gly Asn Leu Gly Leu Val
Tyr Leu Ile Tyr Tyr Glu Glu Ser Leu His Arg Pro Met Tyr Phe Phe
Leu Ala Met Leu Ser Leu Ile Asp Leu Phe Thr Cys Thr Thr Thr Val
                    70
Pro Asn Ala Leu Phe Ile Phe Trp Phe Lys Leu Lys Glu Ile Asn Phe
                                     90
Thr Ala Cys Leu Val Gln Met Phe Phe Val His Gly Phe Thr Gly Val
                                105
                                                     110
```

Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile 120 125 Cys Tyr Pro Leu Arg Tyr Ala Thr Ile Leu Thr Asn Pro Val Ile Ala 135 Lys Ala Gly Leu Ala Thr Phe Leu Arg Gly Val Leu Leu Met Ile Pro 150 155 Phe Pro Phe Leu Val Lys Arg Leu Pro Phe Cys Arg Ser Asn Val Ile 170 Ser His Thr Tyr Cys Asp His Met Ser Val Val Lys Leu Ser Cys Ala 185 190 180 Ser Ile Lys Ile Asn Val Ile Tyr Gly Leu Met Val Ala Leu Leu Ile 200 205 195 Gly Val Phe Asp Ile Cys Cys Ile Ser Val Ser Tyr Thr Met Ile Leu

220

215

```
Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg Gln Lys Ala Phe
                    230
                                        235
Ser Thr Cys Thr Ala His Ile Ser Ala Ile Ile Ile Thr Tyr Val Pro
                245
                                    250
Ala Phe Phe Thr Phe Phe Thr His Arg Phe Gly Gly His Thr Ile Pro
            260
                                265
Pro Ser Leu His Ile Ile Val Ala Asn Leu Tyr Leu Leu Pro Pro
                            280
Thr Leu Asn Pro Ile Val Tyr Gly Met Lys Thr Lys Gln Ile Arg Asp
                        295
                                            300
Ser Ile Ile Lys Phe Phe His Gly Glu Lys Gly Ser Arg
                    310
                                        315
```

<210> 1382 <211> 309 <212> PRT

<213> Mus musculus

<400> 1382

290

Phe Val Arg Lys Leu

Met Asp Ser Ser Asn Arg Thr Arg Val Ala Glu Phe Leu Leu Gly Phe Leu Glu Asn Lys Asp Leu Gln Pro Ile Ile Tyr Gly Leu Phe Leu 25 Ser Met Tyr Leu Val Thr Val Val Gly Asn Met Leu Ile Ile Val Ala 40 Ile Ile Ser Gly Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Val Asp Ile Cys Phe Ile Ser Thr Thr Ile Pro Lys 70 75 Met Leu Val Asn Ile Gln Thr Gln Asn Lys Val Ile Thr Tyr Ala Gly 90 Cys Ile Thr Gln Ile Tyr Phe Phe Leu Leu Phe Val Glu Leu Asp Asn 105 Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Met Arg Tyr Thr Val Ile Met Asn Tyr Gln Leu Cys Gly Phe Leu 135 140 Val Leu Val Ser Trp Ile Val Ser Val Leu His Ala Leu Phe Gln Ser 150 155 Leu Met Met Leu Glu Leu Pro Phe Cys Thr Gln Pro Glu Ile Pro His 165 170 175 Phe Phe Cys Glu Pro Asn Gln Val Ile Gln Leu Thr Cys Ser Asp Ala 185 190 Phe Leu Asn Asp Met Val Ile Tyr Phe Thr Leu Val Leu Leu Ala Ile 200 Val Pro Leu Ala Gly Val Phe Tyr Ser Tyr Phe Lys Ile Val Ser Ser 215 220 Ile Arg Ala Met Ser Ser Val His Gly Lys Tyr Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Leu Val Val Ser Leu Phe Tyr Cys Thr Gly Leu 245 250 Gly Val Tyr Leu Ser Ser Ala Ala Asn His Gly Ser Gln Thr Ser Ala 260 Thr Ala Ser Val Thr Tyr Thr Val Val Thr Pro Met Met Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Leu Lys Arg Leu

295

300

```
<210> 1383
<211> 319
<212> PRT
<213> Mus musculus
<400> 1383
Met Glu Thr Gly Asn Asp Thr Gln Leu Ser Glu Phe Phe Leu Leu Gly
                                    10
Phe Ser Glu Asn Gln Pro Gln Ile Gln Pro Val Ile Phe Gly Leu Phe
                                25
                                                     30
Leu Phe Met Tyr Ile Leu Thr Phe Thr Gly Asn Leu Leu Ile Ile Met
                            40
Ala Ile Ile Val Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu
                        55
Ser Asn Leu Ser Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro
                    70
                                        75
Gln Met Leu Val Asn Ile His Thr Gln Ser Lys Ala Ile Thr Tyr Ala
                                    90
Gly Cys Ile Ile Gln Met Tyr Phe Leu Leu Phe Ser Gly Leu Asp
                                105
                                                     110
Ile Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
His Pro Leu His Tyr Met Ile Ile Met Ser Thr Arg Arg Cys Gly Leu
                                            140
Met Ile Leu Ala Cys Trp Ile Ile Gly Val Ile Asn Ser Leu Leu His
                    150
Thr Phe Leu Val Leu Arg Leu Ser Phe Cys Thr Asn Leu Glu Ile Pro
                                    170
His Phe Phe Cys Glu Leu Asn Gln Val His Gln Ala Cys Ser Asp
                                185
Thr Phe Leu Asn Asp Met Val Ile Tyr Ile Thr Ala Met Leu Leu Ala
                            200
Val Gly Pro Phe Ser Gly Ile Leu Tyr Ser Tyr Ser Arg Ile Val Ser
                        215
Ser Ile Cys Ala Ile Ser Ser Val Gln Gly Lys Tyr Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Cys Thr Leu
                245
                                    250
Leu Gly Val Tyr Leu Ser Ser Ala Val Thr Gln Asn Ser His Ala Thr
                                                     270
            260
                                265
Ala Thr Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
                            280
Phe Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Thr Ala Leu Lys Ile
                                             300
Leu Leu Gly Ser Val Thr Arg Ser Arg Ser Met Asp Ser Pro Ser
<210> 1384
<211> 319
<212> PRT
<213> Mus musculus
<400> 1384
Met Glu Pro Gly Asn Asp Thr Gln Leu Ser Glu Phe Phe Leu Leu Glu
                                    10
```

```
Leu Ser Glu Asn Gln Pro Gln Ile Gln Pro Leu Ile Phe Gly Leu Phe
Leu Ser Met Tyr Leu Val Thr Val Thr Gly Asn Leu Leu Ile Ile Met
Ala Ile Thr Ala Asp Ser His Leu His Thr Pro Met Tyr Ile Phe Leu
Ser Asn Leu Ser Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro
Gln Met Leu Val Thr Ile His Thr Gln Ser Lys Ala Ile Thr Tyr Ala
Asn Cys Ile Thr Gln Val Tyr Phe Leu Leu Phe Ser Val Leu Asp
           100
                                105
Ile Phe Leu Leu Thr Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys
                            120
His Pro Leu His Tyr Met Ile Ile Met Asn Thr Arg Arg Cys Gly Leu
                        135
                                            140
Met Ile Leu Ala Cys Trp Ile Ile Gly Val Ile Asn Ser Leu Leu His
                   150
                                        155
Thr Phe Leu Ala Leu Arg Leu Ser Phe Cys Thr Asp Leu Glu Ile Pro
                165
                                    170
His Phe Tyr Cys Glu Leu Asn Gln Val Val His His Ala Cys Ser Asp
           180
                                185
                                                    190
Ile Ser Leu Asn Asp Met Val Ile Tyr Ile Ala Ala Met Leu Leu Val
                            200
       195
Val Gly Pro Leu Ser Gly Ile Leu Tyr Ser Tyr Ser Lys Ile Val Ser
                        215
                                            220
Ser Ile Cys Ala Ile Ser Ser Val Gln Gly Lys Tyr Lys Ala Phe Ser
                   230
                                        235
Thr Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Cys Thr Leu
                245
                                    250
Leu Gly Val Tyr Leu Ser Ser Ala Val Thr Gln Asn Ala Gln Ala Thr
            260
                                265
Ala Leu Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
                            280
                                                285
Phe Ile Tyr Ser Leu Arg Asn Asn Asp Met Lys Lys Ala Leu Lys Ile
                        295
                                            300
Val Leu Gly Arg Val Thr Arg Asn Arg Leu Thr Asp Leu Pro Ser
```

```
<210> 1385
```

<400> 1385

 Met
 Arg
 Gly
 Glu
 Asn
 Ile
 Thr
 Lys
 Val
 Ser
 Thr
 Phe
 Ile
 Leu
 Leu
 Gly

 Phe
 Pro
 Thr
 Ala
 Pro
 Glu
 Leu
 Gln
 Tyr
 Leu
 Leu
 Phe
 Leu
 Thr
 Tyr
 Phe
 Leu
 Thr
 Tyr
 Phe
 Leu
 Tyr
 Phe
 Leu
 Gly
 Phe
 Leu
 His
 Arg
 Pro
 Met
 Tyr
 Phe
 Leu
 Gly
 Syr
 Tyr
 Phe
 Leu
 Gly
 Syr
 Tyr
 Tyr
 Phe
 Leu
 Gly
 Syr
 Syr
 Syr
 Syr
 Phe
 Ile
 Gly
 Syr
 S

<211> 312

<212> PRT

<213> Mus musculus

```
100
                                105
Val Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
                                                125
Pro Leu Arg Tyr Gln Val Ile Met Thr Thr Gly Leu Cys Val Gln Leu
                        135
                                            140
Val Ala Phe Ser Phe Ala Ser Gly Phe Ser Ile Ser Val Ile Lys Val
                    150
                                        155
Tyr Phe Ile Ser Ser Ala Thr Phe Cys Gly Ser Asn Val Leu Asn His
                165
                                    170
Phe Phe Cys Asp Ile Ser Pro Ile Leu Lys Leu Ala Cys Thr Asp Phe
           180
                                185
                                                    190
Ser Thr Ala Glu Leu Val Asp Phe Ile Leu Ala Phe Ile Ile Leu Val
       195
                            200
Phe Pro Leu Leu Ala Thr Val Leu Ser Tyr Gly His Ile Thr Leu Ala
                        215
                                            220
Val Leu Arg Ile Pro Ser Ala Thr Gly Arg Trp Arg Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Val Thr Ile Phe Tyr Thr Ala Leu Leu
                245
                                    250
Phe Met Tyr Val Arg Pro Gln Ala Ile Asp Thr Arg Ser Ser Asn Lys
            260
                                265
Leu Ile Ser Val Leu Tyr Thr Val Leu Thr Pro Ile Leu Asn Pro Leu
       275
                            280
                                                285
Ile Tyr Cys Leu Arg Asn Lys Glu Phe Lys Asp Ala Leu Arg Lys Ala
                        295
Leu Gly Leu Gly Gln Ala Pro Leu
                    310
<210> 1386
<211> 312
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<212> PRT

<213> Mus musculus

<400> 1386

Met Arg Gly Glu Asn Ile Thr Lys Val Ser Thr Phe Ile Leu Leu Gly Phe Pro Thr Ala Pro Glu Leu Gln Tyr Leu Leu Phe Leu Leu Phe Leu Leu Ala Tyr Leu Phe Val Leu Val Glu Asn Leu Thr Ile Ile Leu Thr Val Trp Ser Ser Ala Ser Leu His Arg Pro Met Tyr Tyr Phe Leu Gly Ser Leu Ser Phe Leu Glu Ile Trp Tyr Val Ser Asp Ile Ile Pro Lys Met Leu Asp Gly Phe Leu Leu Gln Arg Lys Arg Ile Ser Phe Ile Gly Cys Met Thr Gln Leu Tyr Phe Phe Ser Ser Leu Val Cys Thr Glu Cys Val Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Gln Val Ile Met Thr Thr Gly Leu Cys Val Gln Leu Val Ala Phe Ser Phe Ala Ser Gly Phe Thr Ile Ser Val Ile Lys Val Tyr Phe Ile Ser Ser Ala Thr Phe Cys Gly Ser Asn Val Leu Asn His Phe Phe Cys Asp Ile Ser Pro Ile Leu Lys Leu Ala Cys Thr Asp Phe

```
Ser Thr Ala Glu Leu Val Asp Phe Ile Leu Ala Phe Ile Ile Leu Val
                            200
                                                205
Phe Pro Leu Leu Ala Thr Ile Leu Ser Tyr Gly His Ile Thr Leu Ala
                        215
                                            220
Val Leu Arg Ile Pro Ser Ala Thr Gly Arg Trp Arg Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Val Thr Phe Phe Tyr Met Ala Met Ile
                                    250
Phe Met Tyr Val Arg Pro Gln Ala Ile Asp Thr Arg Ser Ser Asn Lys
                                265
Leu Ile Ser Ala Val Tyr Thr Val Leu Thr Pro Met Met Asn Pro Leu
Ile Tyr Cys Leu Arg Asn Thr Glu Phe Lys Asp Ala Val Arg Arg Thr
                                            300
Leu Gly Leu Gly Asn Thr Pro Gln
```

<210> 1387 <211> 323 <212> PRT

<213> Mus musculus

<400> 1387 Met Ala Thr Gln Val His Arg Asn Gly Ser Leu Ser Ala Val Ser Leu Gln Gly Phe Val Leu Val Gly Phe Gly Gly Gly Ala Lys Thr Gln Ala 25 Leu Leu Phe Ala Val Phe Leu Thr Leu Tyr Val Val Thr Val Leu Gly 40 Asn Leu Thr Met Ile Val Val Ile Thr Leu Asp Ala Arg Leu His Ser 55 Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Phe Val Asp Phe Cys Tyr 70 Ser Ser Val Ile Ala Pro Lys Ala Met Thr Ile Phe Leu Ser Ser Ser 85 90 Lys Val Ile Ser Phe Ala Gly Cys Ala Thr Gln Phe Phe Phe Ser 105 100 Leu Leu Val Thr Thr Glu Gly Phe Leu Leu Ala Val Met Ala Tyr Asp 120, 125 Arg Phe Met Ala Ile Cys Ser Pro Leu Arg Tyr Pro Val Thr Met Cys 135 140 Pro Met Ala Cys Ala Arg Leu Val Leu Gly Thr Tyr Cys Gly Gly Cys 150 155 Leu Asn Ser Ile Val Gln Thr Ser Leu Thr Phe Gln Leu Pro Phe Cys 165 170 175 Ser Ser Asn Arg Ile Asp His Phe Tyr Cys Asp Val Pro Pro Leu Leu 180 185 190 Gln Leu Ala Cys Ala Asp Thr Thr Leu Asn Glu Phe Val Met Phe Gly 200 Ile Cys Gly Leu Ile Ile Val Ser Thr Thr Leu Val Val Leu Ile Ser 215 220 Tyr Gly Tyr Ile Thr Met Thr Ile Leu Arg Met Arg Ser Gly Ser Gly 230 235 Arg His Lys Val Phe Ser Thr Cys Gly Ser His Met Thr Ala Val Ser 250 245 Leu Phe Tyr Gly Thr Val Phe Val Met Tyr Ala Gln Pro Gly Ala Leu 265 Thr Ser Met Glu Gln Gly Lys Val Val Ser Val Phe Tyr Thr Leu Val

285 275 280 Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val 290 295 300 Lys Asp Ala Pro Arg Arg Leu Gly Gln Arg His Ser Leu Val Lys Glu 305 310 315 Asp Val Gln <210> 1388 <211> 309 <212> PRT <213> Mus musculus <400> 1388 Met Arg Asn His Ser Thr Val Pro Glu Phe Ile Leu Leu Gly Leu Ser 10 Ala Asp Ala Gln Val Gln Ala Leu Leu Phe Val Leu Phe Leu Val Ile 25 Tyr Leu Leu Thr Leu Met Gly Asn Leu Met Leu Leu Val Val Lys Val Asp Arg His Leu His Thr Pro Met Tyr Phe Phe Leu Gly Gln Leu Ser Phe Leu Asp Leu Cys His Ser Ser Val Ser Val Pro Lys Leu Leu 70 75 Glu Asn Leu Leu Ser Val Lys Lys Thr Ile Ser Val Glu Gly Cys Leu 90 Ala Gln Val Phe Phe Val Phe Ala Thr Gly Gly Thr Glu Ser Cys Leu 100 105 Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Ser Pro Leu 120 125 Leu Tyr Gly Gln Val Met Ser Arg Gln Leu Cys Ala Gly Leu Val Trp 135 140 Gly Ser Trp Ser Leu Ala Phe Leu Asp Ala Phe Ile Asn Ile Leu Val 150 155 Ala Leu Asn Leu Asp Phe Cys Glu Ala Gln Asn Ile His His Phe Ile 165 170 175 Cys Glu Leu Pro Ser Leu Tyr Pro Leu Ser Cys Ser Asp Val Ser Ala 180 185 190 Ser Phe Thr Thr Leu Leu Cys Ser Ser Phe Ile His Phe Phe Gly Asn 195 200 Phe Leu Leu Ile Leu Ser Tyr Ile Arg Ile Leu Leu Thr Ile Leu 215 220 Gly Ile Ser Ser Ala Ser Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Leu Thr Ala Val Ser Phe Phe Tyr Gly Ser Gly Leu Leu Arg 250 245 Tyr Leu Met Pro Asn Ser Gly Ser Thr Gln Glu Leu Ile Phe Ser Leu 265 270 Gln Tyr Ser Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu 280 Lys Asn Lys Glu Val Lys Ala Ala Val Arg Arg Thr Val Thr Lys Tyr Leu Gln Cys Phe Lys 305

Thr Leu Leu Phe Leu Ala Phe Leu Thr Ile Tyr Leu Val Thr Leu Leu

Gly Asn Ser Leu Ile Ile Leu Val Thr Leu Ala Asp Pro Met Leu Gln

```
55
Ser Pro Met Tyr Phe Phe Leu Arg Asn Leu Ser Phe Leu Glu Ile Gly
                    70
                                         75
Phe Asn Leu Val Ile Val Pro Lys Met Leu Gly Thr Leu Ile Ala Gln
                                     90
                85
Asp Thr Ser Ile Ser Phe Leu Gly Cys Ala Thr Gln Met Tyr Phe Phe
            100
                                105
                                                     110
Phe Phe Phe Gly Val Ala Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr
                            120
       115
                                                 125
Asp Arg Tyr Val Ala Ile Cys Ser Pro Leu His Tyr Pro Val Ile Met
                        135
                                             140
Asn Gln Glu Thr Arg Val Lys Leu Ala Ala Ala Ser Trp Phe Pro Gly
                    150
                                         155
                                                             160
Phe Pro Val Ala Thr Val Gln Thr Thr Trp Leu Phe Ser Phe Pro Phe
                                     170
                165
                                                         175
Cys Ala Thr Asn Lys Val Asn His Phe Phe Cys Asp Ser Pro Pro Val
            180
                                185
                                                     190
Leu Arg Leu Val Cys Ala Asp Thr Ala Gln Phe Glu Val Tyr Ala Ile
        195
                            200
                                                 205
Val Gly Thr Ile Leu Val Val Met Ile Pro Cys Leu Leu Ile Leu Cys
    210
                        215
                                             220
Ser Tyr Thr Leu Ile Ala Ala Ser Ile Leu Lys Ile Pro Ser Ala Lys
                    230
                                         235
                                                             240
Gly Lys His Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val
                245
                                     250
Ser Leu Phe Tyr Val Ser Ser Ser Leu Thr Tyr Phe Arg Pro Lys Ser
            260
                                265
                                                     270
Asn Asn Ser Pro Glu Ser Lys Lys Leu Leu Ser Leu Ser Tyr Thr Val
        275
                            280
                                                 285
Val Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Asn Glu
                        295
                                             300
Val Lys Ser Ala Leu Ser Arg Thr Phe His Lys Ala Leu Ala Leu Arg
                                         315
Asn His Ile Thr
```

<210> 1391 <211> 317 <212> PRT

<213> Mus musculus

<400> 1391

Met Ala Ala Gly Asn Gln Thr Arg Ile Ala Glu Phe Ile Leu Met Gly Phe Ser Ser Leu Pro Thr Glu Ile Gln Thr Leu Leu Phe Leu Ala Phe Leu Thr Ile Tyr Leu Val Thr Leu Leu Gly Asn Ser Leu Ile Ile Leu Val Thr Leu Ala Asp Pro Met Leu Gln Ser Pro Met Tyr Phe Phe Leu Arg Asn Leu Ser Phe Met Glu Ile Gly Phe Asn Leu Val Ile Leu Pro Lys Met Leu Arg Thr Leu Ile Ala Gln Asp Thr Ser Ile Ser Phe Leu Gly Cys Ala Thr Gln Met Tyr Phe Phe Phe Phe Gly Val Ala Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys

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Ser Pro Leu His Tyr Pro Ile Ile Met Asn Gln Gly Thr His Ala Arg
                        135
Leu Ala Ala Ser Trp Phe Pro Gly Phe Pro Val Ala Thr Val Gln
                    150
                                        155
Thr Trp Leu Phe Ser Phe Pro Phe Cys Ala Asn Asn Lys Val Asn
                                    170
His Phe Phe Cys Asp Ser Pro Pro Val Leu Arg Leu Val Cys Ala Asp
                               185
Thr Ala Arg Phe Glu Val Tyr Ala Ile Val Gly Thr Ile Leu Val Val
       195
                           200
Met Ile Pro Cys Leu Leu Ile Leu Cys Ser Tyr Thr Leu Ile Ala Ala
                       215
Ser Ile Leu Lys Ile Pro Ser Ala Lys Gly Lys His Lys Ala Phe Ser
                   230
                                       235
Thr Cys Ser Ser His Leu Val Val Val Ser Leu Phe Tyr Val Ser Leu
                245
                                    250
Ser Leu Thr Tyr Phe Arg Pro Lys Ser Lys Asn Ser Pro Glu Ser Lys
           260
                                265
Lys Leu Leu Ser Leu Ser Tyr Thr Val Val Thr Pro Leu Leu Asn Pro
                           280
Ile Ile Tyr Ser Leu Arg Asn Asn Glu Val Lys Asn Ala Leu Ser Arg
                       295
Thr Phe His Lys Ala Leu Ala Leu Arg Lys Phe Ile Leu
                   310
```

<210> 1392

<211> 316

<212> PRT

<213> Mus musculus

<400> 1392

Met Glu Pro Trp Asn Ser Thr Leu Gly Thr Asp Phe Asn Leu Val Gly 10 Ile Leu Asp Asp Ser Gly Ser Pro Glu Leu Leu Cys Ala Thr Phe Thr 20 25 Ala Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Leu Leu Ile Leu Val 40 Ile Thr Met Asp Ala Arg Leu His Val Pro Met Tyr Phe Leu Leu Gly 55 60 Gln Leu Ser Leu Met Asp Leu Leu Phe Thr Ser Val Val Thr Pro Lys 70 75 Ala Val Ile Asp Phe Leu Leu Arg Asp Asn Thr Ile Ser Phe Glu Gly 90 8.5 Cys Ser Leu Gln Met Phe Leu Ala Leu Thr Leu Gly Gly Ala Glu Asp 105 Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu Asn Tyr Met Ile Phe Met Arg Pro Ser Ile Cys Trp Leu Met 135 140 Val Ala Thr Ser Trp Ile Leu Ala Ser Leu Met Ala Leu Gly Tyr Thr 150 155 Thr Tyr Thr Met Gln Tyr Ser Tyr Cys Lys Ser Arg Lys Ile Arg His 170 165 Leu Leu Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr 185 190 Ser Lys Tyr Glu Leu Met Val Tyr Val Met Gly Val Thr Phe Leu Ile 200 Pro Pro Leu Ala Ala Ile Leu Ala Ser Tyr Ser Leu Ile Leu Phe Thr

```
215
                                           220
   210
Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                                       235
                   230
Cys Ser Ser His Leu Thr Val Val Gly Met Phe Tyr Gly Ala Ala Thr
               245
                                   250
Phe Met Tyr Val Leu Pro Ser Ser Phe His Ser Pro Arg Gln Asp Asn
           260
                               265
Ile Ile Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Ile Arg Val
                       295
Leu Gly Arg Tyr Ile Val Pro Ala His Pro Thr Leu
                   310
<210> 1393
<211> 326
<212> PRT
<213> Mus musculus
<400> 1393
Met Glu Phe Val Leu Ser Ala Asp Lys Lys Glu Ile Lys Ser Lys Asn
                5
                                  10
1
Leu Asn Ile Ser Ile Thr Glu Phe Val Leu Leu Gly Phe Ser Asp Val
           20
                               25
Pro Gln Leu Gln Trp Met Leu Phe Gly Ile Phe Leu Phe Met Tyr Leu
                           40
                                               45
Ser Ile Leu Ile Ser Asn Ser Ile Ile Met Leu Ile Thr Arg Thr Asp
                       5.5
Ser Ala Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Asn Phe Ser Phe
                   70
                                       75
Val Glu Ile Cys Tyr Val Thr Val Thr Ile Pro Arg Met Leu Met Asp
               85
                                   90
Leu Cys Thr Gln Lys Gly Thr Ile Ser Leu Leu Ser Cys Ala Val Gln
                                                   110
           100
                               105
Leu Cys Phe Val Ile Met Leu Gly Gly Met Glu Phe Leu Leu Thr
                           120
 115
                                               125
Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu His Tyr
                       135
                                           140
Pro Leu Val Met Asn Asn Lys Val Cys Val Gln Leu Val Ala Ala Cys
                                                           160
                   150
                                       155
Trp Ile Cys Ile Ile Pro Val Val Thr Gly Gln Thr Tyr Gln Ile Phe
               165
                                   170
Ser Leu Pro Tyr Cys Gly Ser Asn Lys Ile His His Phe Phe Cys Asp
           180
                               185
                                                   190
Ile Pro Pro Leu Leu Lys Leu Ala Cys Gly Asp Thr Phe Val Asn Asn
       195
                                               205
                           200
Leu Ala Ile Tyr Ile Ala Ser Val Val Phe Ile Met Val Pro Phe Leu
                       215
                                           220
Leu Ile Leu Val Ser Tyr Gly Lys Ile Ile Cys Asn Val Leu Lys Leu
                   230
                                       235
Ala Thr Ser Gly Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser Ser His
                                   250
               245
Leu Ile Val Val Leu Phe Tyr Gly Thr Ala Thr Ile Thr Tyr Ala
                               265
Gln Pro Lys Ala Tyr Gln Ser Glu Thr Leu Gly Lys Leu Leu Ser Leu
    275
                           280
                                               285
Phe Tyr Thr Ile Leu Ile Pro Leu Leu Asn Pro Ile Ile Tyr Thr Leu
```

```
Ser Thr Tyr Gly Asn Thr
                325
<210> 1394
<211> 312
<212> PRT
<213> Mus musculus
<400> 1394
Met Thr Phe Glu Asn' Phe Thr Met Leu Thr Glu Phe Val Phe Leu Gly
Leu Ser Gly Arg Gln Asp Val Gln Gln Gly Leu Phe Ala Leu Phe Phe
Leu Val Tyr Gly Ile Thr Val Ile Ala Asn Leu Gly Met Val Ile Leu
        35
                            40
Ile Lys Leu Asp Ser Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
    50
Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Ser Thr Val Ser Pro Lys
                    70
Met Leu Ala Asp Phe Leu Ser Lys Glu Lys Arg Ile Pro Tyr Asn Leu
                                    90
Cys Ala Val Gln Met Tyr Phe Phe Gly Ala Phe Ala Asp Val Glu Cys
                                105
Leu Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Thr Ile Val Met Ser Lys Lys Leu Cys Ile Gln Leu
                        135
                                            140
Val Ala Val Ala Tyr Ala Ile Gly Leu Val Asp Ser Ala Ile His Thr
                    150
                                        155
Ser Cys Thr Phe Arg Leu Ser Phe Cys Asn Ser Asn Val Ile Asn His
                165
                                    170
                                                         175
Phe Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr
                                185
                                                    190
Ser Ile Asn Glu Ile Val Met Phe Thr Phe Ile Gly Cys Val Val Gly
                            200
                                                205
Ile Ser Ile Val Thr Val Leu Leu Ser Tyr Cys Tyr Ile Ile Ala Thr
                        215
                                            220
Ile Cys Arg Met Asn Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Met Ala Val Ala Ile Phe His Gly Thr Leu Leu
                                    250
Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Met Asp Thr Asp Lys
                                265
                                                    270
Met Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys Ala
                        295
Ile Asn Ile Asn Leu Trp Pro Gly
305
                    310
<210> 1395
<211> 314
```

<212> PRT

<213> Mus musculus

Arq Asn Lys Asp Ile Met Val Ala Leu Arg Lys Leu Gln Thr Lys Leu

```
<400> 1395
Met Glu His Ser Glu Asn Ser Ala Met Asp Asn Ala Thr Ser Val Thr
                                    10
Gln Phe Leu Leu Gly Phe Ser Gly Val Pro Asn Leu Gln Thr Phe
                                25
Leu Phe Gly Met Phe Ser Ile Met Tyr Val Val Ile Leu Ile Gly Asn
Thr Ser Ile Leu Val Ile Ala Arg Ile Asp Pro Ala Leu Gln Lys Pro
                        55
Met Tyr Tyr Phe Leu Ala Asn Phe Ser Phe Leu Glu Ile Cys Tyr Val
Ser Val Thr Leu Pro Arg Ile Leu Tyr Asn Leu Trp Thr Gln Asp Arg
                                    90
Gly Ile Cys Leu Leu Ala Cys Ala Ile Gln Met Phe Phe Leu Ile
                                105
Leu Ala Ala Thr Glu Cys Phe Leu Leu Ala Val Met Ser Tyr Asp Arg
                            120
                                                 125
Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Pro
                        135
                                            140
Thr Lys Cys Thr Gln Leu Ala Val Gly Ser Trp Leu Gly Gly Ile Pro
                    150
                                        155
Val Gln Ile Gly Gln Thr Cys Arg Ile Phe Ser Leu His Phe Cys Asn
                165
                                    170
                                                         175
Ser Asn Ile Ile Glu His Phe Phe Cys Asp Val Pro Pro Ile Leu Lys
            180
                                ·185
                                                     190
Leu Ala Cys Gly Asp Thr Ser Met His Glu Leu Ser Val Tyr Leu Val
        195
                            200
Ala Met Phe Phe Val Ala Ser Pro Phe Met Leu Ile Leu Ala Ser Tyr
                        215
                                            220
Ser Lys Ile Ile Ala Thr Ile Leu Lys Leu Pro Thr Ala Thr Gly Arg
                    230
                                        235
Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Val Val Leu Leu
                                    250
                245
Phe Phe Gly Ser Ala Thr Ile Asn Tyr Leu Arg Pro Lys Ser Ile His
            260
                                265
                                                     270
Ser Val Gly Thr Asp Glu Leu Leu Ser Leu Phe Tyr Thr Ile Val Thr
        275
                            280
Pro Met Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Ile
                        295
Ala Ala Leu Arg Arg Leu Leu Leu Lys Ile
                    310
<210> 1396
<211> 318
<212> PRT
<213> Mus musculus
<400> 1396
Met Asn His Gln Gln Lys Pro Gln Glu Gly Asn Leu Thr Asn Leu Lys
                                    10
Glu Phe Val Leu Leu Gly Phe Ser Asp Val Pro Asp Leu Gln Trp Val
                                25
Leu Phe Gly Leu Leu Ile Ala Met Tyr Cys Phe Ile Leu Leu Gly Asn
Gly Thr Ile Val Leu Ile Thr Asn Val Asp Ser Ala Leu Gln Thr Pro
Met Tyr Phe Phe Leu Gly Asn Phe Ser Phe Leu Glu Ile Cys Tyr Val
```

```
Ser Ile Thr Leu Pro Arg Met Val Phe Asn Leu Gly Thr Gln Arg Arg
Thr Ile Ser Phe Ile Ala Cys Ala Thr Gln Met Cys Phe Thr Leu Ile
                                105
Leu Gly Ala Thr Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg
Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Gln
                        135
Lys Val Cys Ser Gln Leu Val Ile Gly Ser Trp Ile Ser Gly Ile Pro
                    150
                                        155
Ile Gln Ile Gly Gln Thr Ser His Ile Phe Ser Leu Ser Phe Cys Gly
                                    170
                                                        175
Ser Asn Gln Ile Asn His Phe Phe Cys Asp Ile Pro Pro Ile Leu His
                                185
Leu Ala Cys Gly Asp Ile Phe Ile Asn Glu Met Met Val Phe Leu Gly
                            200
Ala Phe Leu Phe Val Leu Phe Pro Phe Met Leu Ile Val Phe Ser Tyr
                        215
Ser Lys Ile Ile Ser Thr Val Leu Lys Leu Ser Ser Thr Lys Ser Arg
                    230
                                        235
Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ala Val Val Ile Leu
                245
                                    250
Phe Phe Gly Ser Ala Met Ile Thr Tyr Phe Arg Ser Asn Ala Ser His
                                265
Ser Gly Glu Thr Asp Lys Val Leu Ser Leu Phe Tyr Thr Val Val Thr
                            280
Pro Met Phe Asn Pro Met Val Tyr Ser Leu Arg Asn Lys Asp Val Thr
                        295
Ile Ala Leu Arg Lys Phe Leu Cys Lys Gln Phe Val Lys Ile
```

<210> 1397

<211> 317

<212> PRT

<213> Mus musculus

<400> 1397

Met Glu Gly Asp Asn Thr Ser Ser Thr Asp Phe Thr Phe Met Gly Leu 10 Phe Asn Thr Glu Glu Thr Ser Gly Leu Val Phe Ala Thr Ile Ser Val 25 Ile Phe Leu Thr Ala Leu Val Ala Asn Gly Ile Met Ile Phe Leu Ile 40 His Thr Asp Ala His Leu His Thr Pro Met Tyr Phe Leu Leu Ser His 55 Leu Ser Phe Ile Asp Met Met Tyr Ile Ser Thr Ile Val Pro Lys Met 75 Leu Val Asp Tyr Leu Leu Gly Gln Arg Thr Ile Ser Phe Val Gly Cys 90 Thr Ala Gln His Phe Leu Tyr Leu Thr Leu Val Gly Ala Glu Phe Phe 105 Leu Leu Gly Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro 120 Leu Arg Tyr Pro Val Leu Met Ser Arg Arg Ile Cys Trp Ile Ile Ile 140 Ala Gly Ser Trp Phe Gly Gly Ser Leu Asp Gly Phe Leu Leu Thr Pro 150 Ile Thr Met Ser Phe Pro Phe Cys Arg Ser Arg Glu Ile Asn His Phe

```
170
                165
Phe Cys Glu Ala Pro Ala Val Leu Lys Leu Ala Cys Ala Asp Thr Ala
                                                    190
           180
                                185
Leu Tyr Glu Thr Val Met Tyr Val Cys Cys Val Leu Met Leu Leu Ile
                            200
       195
Pro Phe Ser Val Val Ile Ser Ser Tyr Ala Arg Ile Leu Ala Thr Val
                        215
Tyr His Met Ser Ser Val Glu Gly Arg Lys Lys Ala Phe Ala Thr Cys
                    230
Ser Ser His Met Thr Val Val Thr Leu Phe Tyr Gly Ala Ala Ile Tyr
                245
                                    250
Thr Tyr Met Val Pro His Ser Tyr His Ser Pro Ser Gln Asp Lys Ile
            260
                                265
                                                    270
Phe Ser Val Phe Tyr Thr Ile Leu Thr Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Met Arg Asn Lys Asp Val Ser Gly Gly Leu Arg Arg Ala Leu
                        295
Gly Lys Ile Arg Ser Ser Gln Arg Val Ser Lys Asp Tyr
                    310
<210> 1398
<211> 309
<212> PRT
<213> Mus musculus
<400> 1398
Met Ala Ile Asn Asn Ser Thr Thr Val Val Glu Phe Val Leu Gln Gly
                                    10
                 5
Leu Ser Glu Asp Pro Gly Leu Gln Ala Leu Phe Leu Ala Phe Phe Leu
                                25
Leu Leu Tyr Ile Leu Ala Leu Ala Gly Asn Thr Leu Ile Ile Ala
   35
                            40
Ile Ser Leu Asn Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Asn Leu Ala Leu Leu Asp Ile Ile Cys Thr Ser Thr Val Val Pro Lys
                                        75
                    70
Leu Leu Glu Gly Leu Val Gly Lys Ser Ser His Ile Ser Tyr Lys Gly
                                    90
               85
Cys Met Thr Gln Val Phe Phe Leu Ile Trp Val Leu Gly Ala Glu Leu
           100
                                105
Leu Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
                                                125
       115
Pro Leu His Tyr Asn Thr Leu Met Ser Trp Pro Ile Cys Val Leu Leu
                        135
                                            140
Ala Gly Phe Val Trp Val Ile Gly Ile Ala Asn Thr Ser Val His Ile
```

Gly Leu Leu Val Arg Leu Asn Phe Cys Gly Ser Asn Gln Ile Arg His

Phe Leu Cys Glu Val Pro Thr Leu Leu Leu Leu Ser Cys Ser Pro Thr

Thr Leu Asn Asn Ile Met Leu Val Ile Ala Asp Val Tyr Phe Gly Val

Leu Asn Phe Leu Leu Thr Met Ile Ser Tyr Ser Phe Ile Ile Ser Ser

Ile Leu Arg Ile Arg Ser Ala Glu Gly Lys Lys Arg Ala Phe Ser Thr

Cys Ser Ala His Leu Val Val Val Thr Leu Tyr Tyr Ser Thr Ile Ile

Tyr Thr Tyr Leu Gln Pro Gly Ser Gly Ser Ser Phe Gln Asn Ser Lys 265 Val Val Thr Leu Leu Tyr Thr Ala Val Ser Pro Thr Leu Asn Pro Ile 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Lys Arg Leu 295 290 Phe Pro Cys Phe His <210> 1399 <211> 311 <212> PRT <213> Mus musculus <400> 1399 Met Ile Lys Asn Asn Gln Thr Leu Phe Asn Gln Phe Leu Leu Gly Leu Pro Ile Pro Ala Glu His Gln Gln Leu Phe Phe Ala Leu Phe Leu Ser Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu 40 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 70 75 Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile Thr Tyr Ala Gly 90 85 Cys Leu Thr Gln Met Tyr Phe Phe Val Leu Phe Gly Gly Leu Glu Ile 100 105 110 Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Leu 120 Pro Leu His Tyr Thr Ser Ile Met Ser Leu Lys Leu Cys Val Cys Leu 135 Val Leu Leu Ser Trp Val Ile Ser Ile Leu Asn Ser Met Leu His Thr 150 155 Leu Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Met Ile Arg His 170 165 Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile 180 185 190 Tyr Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Pro Leu Met Val 195 200 Ile Pro Phe Leu Leu Ile Val Met Ser Tyr Val Gln Ile Ile Phe Ser 215 220 Ile Leu Lys Ala Ser Ser Thr Arg Ala Ile Tyr Lys Val Phe Ser Thr 230 235 Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Thr Ile Ile 245 250 Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Phe Thr Ala Lys Glu Ala 270 265 Ser Ile Ala Ile Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Glu Ala Leu Ile Asn Val 295

Leu Ile Lys Lys Ile Pro Leu

```
<211> 314
<212> PRT
<213> Mus musculus
<400> 1400
Met Thr Arg Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Leu Gly
                                    10
Leu Pro Ile Pro Pro Glu His Gln Gln Leu Tyr Tyr Ala Leu Leu Leu
                                25
Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
                            40
Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Ser Lys Val Pro Ser Ile Pro Tyr Ala Gly
Cys Leu Ala Gln Ile Tyr Phe Phe Leu Tyr Phe Gly Asp Leu Gly Asn
           100
                                105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
       115
                                                125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Arg Leu Cys Val Ser Leu
                        135
                                            140
Val Leu Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                        155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
                                    170
               165
                                                        175
Tyr Phe Cys Asp Met Ser Thr Leu Leu Lys Val Ala Cys Ser Asp Thr
           180
                                                    190
                                185
His Asp Asn Glu Leu Ala Ile Phe Ile Leu Gly Gly Pro Ile Val Val
                            200
       195
                                                205
Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Val Ser Ser
                        215
                                            220
Ile Phe Lys Phe Pro Ser Phe Gln Gly Ile Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
                245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Thr Tyr Val Lys Glu Thr
                                                    270
                                265
Ile Met Ser Leu Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Ser Asn Arg Asp Ile Lys Asp Ala Leu Glu Lys Ile
                        295
Met Cys Lys Arg Gln Ile Pro Phe Leu
                    310
<210> 1401
<211> 312
<212> PRT
<213> Mus musculus
<400> 1401
Met Ile Lys Asn Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Gly
                                    10
Leu Pro Ile Pro Pro Glu His Gln His Leu Phe Tyr Ala Leu Phe Leu
                                25
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
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```
Ile Ile Leu Asp Phe His Leu His Thr Pro Ile Tyr Leu Phe Leu Ser
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Thr Ile Ser Tyr Val Gly
                                   90
Cys Leu Thr Gln Met Tyr Phe Pro Asn Val Phe Ala Asn Leu Glu Asn
           100
                               105
Phe Leu Leu Met Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Tyr
                           120
Pro Leu Arg Tyr Thr Ser Ile Met Ser Pro Ile Leu Cys Val Cys Met
                       135
   130
                                           140
Val Phe Met Ser Trp Leu Leu Thr Met Leu Asn Ser Thr Leu His Thr
                   150
                                       155
Val Leu Ile Val Lys Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
              165
                                   170
                                                        175
Phe Phe Cys Asp Ile Ser Ala Val Leu Lys Leu Ala Cys Ser Asp Ile
           180
                               185
                                                   190
Tyr Ile Asn Glu Leu Thr Ile Phe Ile Thr Gly Ala Phe Ile Ile Val
       195
                           200
Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Val Gln Ile Val Cys Ser
                       215
Ile Leu Lys Phe Ser Ser Thr Arg Gly Ile Ala Lys Ile Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
               245
                                   250
Gly Leu Tyr Leu Cys Pro Ser Thr Asn Asn Ser Thr Val Lys Asp Thr
           260
                               265
Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala Leu Ile Arg Val
                      295
Leu Cys Lys Lys Glu Ile Ser Leu
                   310
```

<210> 1402

<211> 311

<212> PRT

<213> Mus musculus

<400> 1402

Met Ile Met Asn Asn Lys Thr Val Ile Thr Gln Phe Ile Leu Leu Gly 10 Leu Pro Ile Leu Pro Glu Tyr Gln His Leu Phe Tyr Ala Leu Phe Leu 2.0 2.5 Ser Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu 40 45 Ile Gln Leu Asp Ser His Leu His Thr Pro Ile Tyr Leu Phe Leu Ser 60 55 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 70 75 Leu Leu Leu Asn Met Gln Ser Gln Asp Thr Ser Ile Pro Tyr Ala Gly 90 85 Cys Leu Thr Gln Met Tyr Phe Ser Asn Leu Phe Gly Ser Leu Glu Ile 105 Phe Leu Leu Val Ile Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Leu 120 Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Val Cys Leu

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135
                                            140
Val Leu Leu Ser Trp Val Ile Ser Met Leu Tyr Ser Met Leu His Thr
                    150
                                        155
Leu Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
                                    170
                                                        175
                165
Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile
            180
                                185
                                                    190
His Ile Asn Glu Leu Met Ile Phe Phe Leu Gly Gly Pro Leu Thr Val
                            200
                                                205
Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Ile Gln Ile Val Phe Ser
                        215
Ile Leu Lys Ile Ser Ser Thr Arg Ala Ile His Lys Val Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                                    250
                245
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Phe Ser Val Lys Lys Ala
                                265
Ser Ile Thr Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Glu Ala Leu Val Arg Val
                        295
Leu Ile Lys Lys Ile Ser Leu
<210> 1403
<211> 315
<212> PRT
<213> Mus musculus
<400> 1403
Met Asp Thr Tyr Asn Leu Thr Val Leu Lys Tyr Phe Ile Leu Thr Gly
                                    10
Ile Thr Asp Leu Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
Ile Ile Tyr Met Ile Ser Val Val Gly Asn Leu Gly Leu Ile Ile Leu
        35
                            40
Thr Lys Ile Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
Gln Leu Ser Leu Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys
                    70
Met Leu Ile Asn Phe Val Ala Asp Gln Pro Thr Ile Ser Tyr Asn Trp
                                    90
Cys Ser Val Gln Leu Thr Phe Phe Ser Ile Phe Ile Thr Thr Glu Val
            100
                                105
Phe Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu Leu Tyr Thr Ile Ile Met Ser Gln Arg Leu Cys His Val Leu
                        135
                                            140
Val Ala Ile Pro Tyr Leu Tyr Ser Val Phe Ile Ser Leu Trp Thr Ile
```

Ile Lys Ile Phe Thr Ser Ser Phe Cys Gly His Asn Ile Ile Arg Tyr

Phe Tyr Cys Asp Ser Leu Pro Leu Ile Leu Met Leu Cys Ser Asp Thr

His Glu Ile Lys Leu Ile Ile Leu Ile Phe Ala Thr Phe Asn Leu Ile 200

Ser Ser Leu Leu Val Val Ser Ile Ser Tyr Ile Leu Ile Leu Val Ser

215

185

170

175

190

205

220

150

```
Ile Leu Arg Met Asn Ser Ser Glu Gly Arg His Lys Ala Phe Ser Thr
                    230
Cys Gly Ser His Leu Thr Val Ile Val Ile Phe Tyr Gly Thr Leu Phe
                245
                                    250
Phe Met Tyr Ala Gln Pro Lys Ser Ile His Ser Phe Glu Thr Gly Gln
                                                     270
Val Ala Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Met
                            280
Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Gln Ala Leu Asn Arg Lys
                        295
Trp Lys Met Cys Val Asn Ile Leu Phe Lys Leu
                    310
<210> 1404
<211> 313
<212> PRT
<213> Mus musculus
```

<400> 1404 Met Glu Lys Tyr Asn Leu Thr Ile Val Thr Glu Phe Ile Leu Val Gly 10 Ile Thr Asn His His Glu Phe Gln Val Pro Leu Phe Gly Leu Tyr Leu Ile Ile Tyr Leu Thr Ser Leu Val Asp Asn Leu Gly Met Ile Ile Leu Thr Ile Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg His Leu Ala Thr Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys 70 Met Leu Arg Asn Phe Leu Val Asp Gln Asn Ile Ile Ser Phe Tyr Ala 90 Cys Ala Ile Gln Ser Ser Phe Phe Gly Met Phe Ile Val Cys Glu Phe 105 Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Lys Ala Cys Trp Ile Leu 135 Val Thr Ile Pro Tyr Leu Tyr Ser Ile Ile Val Ser Leu Leu Val Asn 155 Ile Lys Ile Phe Thr Leu Ser Phe Cys Gly Tyr Asn Val Ile Ser His 170 165 Phe Tyr Cys Asp Ala Leu Pro Leu Leu Thr Leu Ala Cys Ser Asn Thr 185 190 His Glu Ile Glu Ala Ile Ile Leu Ile Phe Ser Ala Phe Asn Leu Leu 195 200 Ser Ser Leu Leu Ile Val Ile Gly Ser Tyr Leu Leu Ile Leu Met Ala 215 Ile Leu Arg Ile Asn Ser Thr Glu Gly Lys Trp Lys Ala Phe Ser Thr 235 230 Cys Gly Ser His Leu Thr Val Val Ile Val Phe Tyr Gly Thr Leu Ile 250 245 Cys Met Tyr Leu Gln Pro Thr Ser Thr His Ser Ile Asp Thr Gly Lys 260 265 270 Gly Thr Ser Ile Phe Tyr Thr Gln Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Thr Asp Val Leu Lys Lys Thr 295 300 Lys Glu Lys Val Tyr Asn Leu Val Ser

```
<210> 1405
<211> 312
<212> PRT
<213> Mus musculus
<400> 1405
Met Glu Lys Arg Asn Leu Thr Val Val Thr Glu Phe Ile Leu Met Gly
Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
Ile Ile Tyr Leu Ile Ser Leu Leu Gly Asn Met Gly Met Ile Ile Leu
        35
Thr Met Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
His Leu Ala Ile Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys
                    70
                                         75
Met Leu Glu Asn Phe Val Val Asn Gln Asn Thr Ile Ser Asn His Leu
                                     90
Cys Ala Ile Gln Leu Thr Phe Phe Leu Val Phe Ile Ile Cys Glu Leu
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                             120
                                                 125
Pro Leu Leu Tyr Thr Val Ile Met Ser His Arg Val Cys Trp Val Leu
                        135
Val Ala Val Pro Tyr Phe Tyr Ser Val Ile Ile Ser Leu Leu Ile Thr
                    150
                                         155
Ile Lys Ile Phe Ala Leu Pro Phe Cys Asp Tyr Arg Ile Val Ser His
                                     170
                                                         175
Phe Cys Asp Ser Leu Pro Leu Ile Ser Leu Leu Cys Ser Asn Thr His
                                185
                                                     190
Asp Ile Glu Ile Ile Ile Leu Ile Ser Ala Gly Phe Asn Leu Val Ser
                            200
                                                 205
Ser Leu Val Val Leu Leu Phe Ser Tyr Leu Leu Ile Leu Ile Ala Ile
                                             220
Phe Arg Met Asn Ser Ala Glu Gly Arg Gln Lys Ala Leu Ser Thr Cys
                    230
                                         235
Gly Ser His Leu Thr Val Val Ile Val Phe Tyr Gly Thr Leu Ile Phe
                245
                                     250
Met Tyr Val Gln Pro Lys Ser Ser His Ser Phe Asp Thr Asp Lys Val
            260
                                                     270
Ala Ser Ile Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Leu Ile
        275
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Tyr Ala Leu Glu Arg Leu Trp
                        295
                                             300
Lys Met Leu Gly Asn Ile Phe Ser
305
                    310
<210> 1406
<211> 313
<212> PRT
<213> Mus musculus
<400> 1406
Met Glu Asn Gln Asn Leu Ser Val Leu Asn Glu Phe Ile Leu Val Gly
                 5
```

```
Leu Ile Tyr Val Ala Ser Val Val Gly Asn Leu Gly Met Ile Val Leu
Thr Lys Leu Asp Glu Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
His Leu Ala Phe Ile Asp Phe Gly Tyr Ser Thr Ala Val Gly Pro Lys
                    70
Thr Leu Val Ser Phe Val Thr Asn Lys Asn Thr Ile Pro Tyr Asn Trp
Cys Ala Phe Gln Leu Ser Leu Phe Ile Phe Ile Ile Ser Glu Leu
            100
Phe Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Lys Val Cys Trp Val Leu
                        135
                                            140
Val Thr Ile Pro Tyr Leu Phe Ser Ala Phe Leu Ser Leu Ile Thr Thr
                    150
                                        155
Ile Lys Ile Phe Ile Ser Ser Phe Cys Gly Tyr Asn Val Ile Ser His
                                    170
                165
Phe Tyr Cys Asp Ser Leu Pro Leu Leu Thr Leu Ile Cys Ser Gly Thr
            180
                                185
Arg Asp Val Glu Leu Ile Ile Leu Ile Phe Ser Ala Phe Asn Leu Ile
                            200
Ser Ser Leu Ser Val Val Leu Val Ser Tyr Thr Phe Ile Leu Val Ala
                        215
Ile Leu Arg Met Asn Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr
                    230
Cys Gly Ser His Leu Thr Val Val Val Ile Leu Tyr Gly Thr Leu Ser
                245
                                    250
Phe Met Tyr Ile Gln Pro Lys Ser Ser His Ser Phe Glu Asn Asp Lys
                                265
Met Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Val Leu Asn Pro Ile
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Gln Lys Leu
                        295
Trp Lys Asn Val Cys Lys Val Cys Ile
                    310
<210> 1407
<211> 315
<212> PRT
<213> Mus musculus
<400> 1407
Met Ala Pro Arg Asn Leu Ser His Val Thr Glu Phe Ile Leu Val Gly
Val Ser Asp Leu Pro Glu Leu Gln Val Pro Leu Phe Phe Val Phe Leu
Val Ile Tyr Leu Leu Thr Ala Ala Gly Asn Leu Gly Ile Ile Thr Leu
```

Thr Ser Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg

His Leu Ala Val Ile Asn Phe Gly Asn Ser Thr Val Ile Ala Pro Lys

Met Leu Val Asn Phe Leu Val Ser Lys Lys Thr Thr Leu Tyr Tyr Glu

Cys Ala Thr Gln Leu Gly Gly Phe Leu Val Phe Ile Val Ala Glu Ile

75

90

80

55

70

Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Phe Phe Val Leu Phe Phe

```
100
                                105
Phe Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Met Val Val Val Ser Arg Arg Val Cys Leu Leu
                        135
                                            140
Val Ser Leu Thr Tyr Phe Tyr Gly Phe Cys Thr Ala Ile Val Val Ser
                    150
                                        155
Ser Cys Val Phe Ser Val Ser Tyr Cys Ser Ser Lys Lys Ile Asn His
                165
                                    170
Phe Tyr Cys Asp Asn Val Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr
           180
                                185
                                                    190
Tyr Leu Pro Glu Thr Val Val Phe Ile Ser Ala Ala Thr Asn Leu Phe
       195
                            200
Phe Ser Met Ser Ile Val Leu Val Ser Tyr Phe Asn Ile Val Leu Ser
                        215
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Met Met Ala Val Thr Val Phe Tyr Gly Thr Leu Leu
                245
                                    250
Phe Met Tyr Leu Gln Pro Gln Thr Asn His Ser Leu Asp Thr Asp Lys
            260
                                265
Met Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Met
       275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Leu Lys Arg Phe
                        295
Met Thr Asn Pro Cys Asp Ser Phe Lys Ser Leu
                    310
<210> 1408
```

<210> 1408 <211> 308 <212> PRT

<213> Mus musculus

<400> 1408

Met Gly Gln Pro Asn Ile Thr Met Pro Thr Glu Phe Ile Leu Met Gly 5 10 Val Thr Gln Thr Ala Glu Leu Lys Leu Pro Leu Phe Ala Val Phe Leu 25 Thr Ile Tyr Ala Ile Thr Val Val Gly Asn Leu Gly Met Ile Ile Leu 40 Thr Lys Leu Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Ile Arg 55 60 His Leu Ala Phe Ile Asp Leu Gly Asn Ser Thr Ala Ile Cys Pro Lys 70 75 Met Leu Val Asn Phe Val Val Asp Lys Asn Asn Ile Thr Tyr Tyr Ala 8.5 90 Cys Ala Thr Gln Met Ala Cys Phe Ile Leu Phe Ile Val Ser Glu Phe 100 105 110 Ser Ile Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Ser Ala Ile Met Ser Gln Arg Arg Cys Gln Val Leu 135 140 Ile Gly Ile Pro Tyr Leu Tyr Ser Ile Phe Gln Ala Leu Leu Phe Pro 150 155 Ile Arg Tyr Phe Thr Leu Ser Phe Cys Gly Ala Asn Val Ile Ser His 165 170 Phe Tyr Cys Asp Val Val Pro Leu Leu Pro Leu Ile Cys Ser His Val

```
Glu Glu Thr Glu Leu Leu Thr Ile Leu Phe Ser Ala Phe Asn Leu Ile
                            200
Ser Ser Leu Leu Val Val Leu Leu Ser Tyr Met Leu Ile Leu Leu Thr
                        215
Ile Phe Arg Met Arg Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Val Phe Tyr Gly Ser Leu Leu
Phe Met Tyr Val Gln Pro Lys Ser Ala His Ser Phe Glu Tyr Asp Lys
Ala Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe His Arg Val
                        295
   290
Phe Lys Asn Leu
305
```

<210> 1409 <211> 310 <212> PRT

<213> Mus musculus

<400> 1409 Met Asp Lys Glu Asn His Ser Val Val Thr Glu Phe Val Phe Met Gly Ile Thr Gln Asp Pro Gln Leu Gln Ile Ile Phe Phe Val Val Phe Leu Leu Val Tyr Leu Val Asn Val Ile Gly Asn Val Gly Met Ile Ile Leu 35 40 Ile Ile Thr Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Cys 55 Asn Leu Ser Phe Val Asp Leu Gly Tyr Ser Ser Ala Ile Ala Pro Arg 70 75 Met Leu Ala Asp Phe Leu Thr Lys His Lys Val Ile Ser Phe Ser Ser 90 Cys Ala Thr Gln Phe Ala Phe Phe Val Gly Phe Val Asp Ala Glu Cys 105 Tyr Val Leu Ala Ala Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Arg 120 Pro Leu His Tyr Ser Thr Leu Met Ser Lys Lys Val Cys Leu Val Leu 140 Met Leu Gly Ser Tyr Phe Ala Gly Leu Val Ser Leu Val Ala His Thr 150 155 Ser Leu Thr Phe Ser Leu Ser Tyr Cys Gly Ser Asn Ile Ile Asn His 165 170 Phe Phe Cys Glu Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr 185 190 Tyr Ile Ser Glu Ile Leu Leu Phe Ser Leu Cys Gly Phe Ile Glu Phe 195 200 Ser Thr Ile Leu Ile Ile Phe Ile Ser Tyr Ala Phe Ile Leu Ile Ala 210 215 Ile Ile Arg Ile Arg Ser Ala Glu Gly Arg Leu Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Thr Gly Val Thr Leu Phe Tyr Gly Thr Val Met 245 250 Phe Met Tyr Leu Arg Pro Thr Ser Ser Tyr Ser Leu Asp Gln Asp Lys 265

Trp Ala Ser Val Phe Tyr Thr Ile Ile Ile Pro Met Leu Asn Pro Leu

```
275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Lys Lys Leu
    290
                        295
                                             300
Ile Gly Lys Lys Pro Gln
305
                    310
<210> 1410
<211> 320
<212> PRT
<213> Mus musculus
<400> 1410
Met Ser Phe Gln Lys Val Glu Met Ser His Arg Asn Ser Thr Val Pro
                                    10
Asp Glu Phe Ile Leu Thr Arg Ile Thr His Arg Pro Glu Leu Gln Leu
            20
                                 25
Leu Leu Gly Val Phe Ile Val Ile Tyr Gly Val Ala Met Ile Gly
                            40
Asn Met Ser Met Ile Ile Leu Thr Lys Leu Asp Ser Arg Leu His Thr
                        55
Pro Met Tyr Tyr Phe Ile Arg His Leu Ala Phe Ile Asp Leu Gly Asn
                    70
Cys Thr Val Ile Tyr Pro Lys Met Met Val Asn Phe Val Val Glu Gln
                85
                                    90
Asn Val Ile Ser Tyr Tyr Ala Cys Ala Val Gln Met Ala Phe Tyr Ile
            100
                                105
Ala Phe Ile Ile Ser Glu Leu Phe Ile Leu Ser Ala Met Ala Tyr Asp
                            120
                                                 125
Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Ser Ala Ile Met Ser
    130
                        135
                                             140
Gln Arg Arg Cys His Val Leu Val Gly Ile Pro Tyr Leu Tyr Ser Val
                    150
                                         155
Phe Gln Ala Val Met Ile Thr Ser Lys Ile Phe Thr Leu Thr Phe Cys
                                    170
Asp Ser Asn Val Ile Ser His Phe Tyr Cys Asp Asn Val Pro Met Leu
            180
                                185
                                                     190
Leu Leu Leu Cys Ser Asn Ala Arg Asp Ile Glu Leu Leu Ile Ile Leu
                            200
                                                 205
Phe Ser Ala Leu Asn Leu Ile Ser Ser Leu Phe Val Val Leu Val Ser
                        215
Tyr Leu Leu Ile Leu Leu Ala Ile Tyr Arg Met His Ser Ala Asp Gly
                    230
                                         235
Arg Lys Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Val
                245
                                    250
Val Phe Tyr Gly Thr Leu Leu Phe Met Tyr Leu Gln Pro Lys Ser Thr
            260
                                265
                                                     270
His Ser Phe Glu Thr Asp Lys Ile Ala Ser Val Phe Tyr Thr Leu Val
        275
                            280
                                                 285
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Phe Arg Asn Lys Glu Val
                        295
                                             300
Lys Asn Ala Val Leu Arg Val Phe Arg Tyr Gln Cys Lys Leu Cys Thr
                    310
                                         315
<210> 1411
<211> 319
<212> PRT
```

<213> Mus musculus

```
Met Ala Glu Val Asn Ile Ser Tyr Val Ser Glu Phe Ile Leu Lys Gly
Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Cys Phe Val Met Phe Leu
Thr Ile Tyr Leu Val Thr Val Leu Gly Asn Leu Gly Leu Ile Val Ile
Ile Arg Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ala Phe Val Asp Leu Cys Tyr Ser Ser Ala Ile Thr Pro Lys
                    70
Met Met Val Asn Phe Val Val Glu Arg Asn Thr Ile Pro Phe His Ala
Cys Ala Thr Gln Leu Gly Cys Phe Leu Thr Phe Met Ile Thr Glu Cys
            100
Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                            120
Pro Leu His Tyr Ser Thr Leu Met Ser Lys Arg Val Cys Ile Gln Leu
                        135
                                            140
Val Ala Val Pro Tyr Val Tyr Ser Phe Leu Val Ala Leu Phe His Thr
                    150
                                        155
Ile Ile Thr Phe Arg Leu Thr Tyr Cys Gly Pro Asn Val Ile Asn His
                165
                                    170
Phe Tyr Cys Asp Asp Leu Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr
            180
                                185
His Met Lys Glu Ile Leu Ile Phe Ala Phe Ala Gly Phe Asp Met Ile
        195
                            200
Cys Ser Ser Ser Ile Val Leu Thr Ser Tyr Leu Phe Ile Ile Ala Ala
                        215
                                             220
Ile Leu Arg Ile Arg Ser Thr Gln Gly Arg Arg Lys Ala Ile Ser Thr
                    230
                                        235
Cys Gly Ser His Met Val Ala Val Thr Ile Phe Tyr Gly Thr Leu Ile
                245
                                    250
Phe Met Tyr Leu Gln Pro Lys Ser Asn His Ser Leu Asp Thr Asp Lys
                                265
Met Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Ser Lys Lys Ala
                        295
Leu Asp Lys Gly Tyr Glu Thr Leu Lys Ile Leu Arg Leu Ser Lys
<210> 1412
<211> 319
<212> PRT
<213> Mus musculus
<400> 1412
Met Gly Arg His Asn Leu Thr Val Val Thr Glu Phe Val Leu Met Gly
Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
```

Ile Ile Tyr Leu Ile Ser Leu Ile Gly Asn Leu Gly Met Ile Ile Leu

Thr Thr Val Asp Ser Lys Leu Gln Thr Pro Met Tyr Phe Phe Leu Lys

His Leu Ala Ile Thr Asp Leu Gly Tyr Ser Thr Ser Val Gly Pro Lys

35

<400> 1411

```
70
Met Leu Val Asn Phe Val Val Asp Gln Asn Thr Ile Ser Phe Lys Leu
                                    90
                8.5
Cys Ala Thr Gln Leu Ser Phe Phe Leu Val Phe Ile Val Ser Glu Leu
                                105
            100
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
                                                 125
Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Lys Leu Cys Trp Val Leu
                        135
                                             140
Val Ala Ile Pro Tyr Leu Tyr Cys Thr Phe Val Ser Leu Leu Val Thr
                    150
                                        155
Val Lys Ile Phe Thr Leu Ser Phe Cys Gly Tyr Asn Val Ile Ser His
                                    170
Phe Tyr Cys Asp Ser Leu Pro Leu Leu Pro Leu Leu Cys Ser Asp Thr
            180
                                185
                                                     190
His Asp Ile Glu Leu Ile Ile Leu Ile Leu Ala Ala Phe Asp Leu Ile
        195
                            200
                                                 205
Ser Ser Leu Leu Val Val Leu Val Ser Tyr Leu Leu Ile Leu Ile Ala
                        215
                                             220
Ile Val Arg Met Asn Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                         235
Cys Gly Ser His Leu Thr Val Val Ile Val Phe Tyr Gly Thr Leu Ile
                245
                                    250
Phe Met Tyr Val Gln Pro Asn Ser Ser His Ser Phe Glu Thr Asp Lys
            260
                                 265
                                                     270
Val Ala Ser Ile Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
        275
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Tyr Ala Leu Lys Arg Thr
                        295
                                             300
Leu Asn Asn Leu Cys Lys Leu Phe Ser Leu Ala Phe His Lys Ile
                    310
```

<210> 1413

<211> 314

<212> PRT

<213> Mus musculus

<400> 1413

Met Ala Gln Ile Asn Cys Thr Gln Val Thr Glu Phe Ile Leu Val Gly Leu Thr Asp Arg Glu Glu Leu Lys Met Pro Leu Phe Val Val Phe Leu Ser Ile Tyr Leu Phe Thr Thr Leu Gly Asn Leu Gly Leu Ile Leu Val Ile Arg Thr Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Ala Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Thr Pro Lys Met Leu Gly Asn Phe Leu Tyr Lys Gln Asn Met Ile Ser Phe Asn Ala Cys Ala Ala Gln Leu Gly Cys Phe Leu Ala Phe Met Thr Ala Glu Cys Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Met Val Leu Met Ser Pro Gly Ile Cys Phe Gln Leu Val Ala Ala Pro Tyr Ser Tyr Ser Phe Leu Val Ala Leu Phe His Ala

```
Ile Leu Thr Phe Arg Leu Cys Tyr Cys His Ser Asn Ala Ile Asn His
                165
                                    170
Phe Tyr Cys Asp Asp Met Pro Leu Leu Arg Leu Thr Cys Ser Asp Thr
            180
                                185
                                                     190
His Ser Lys Gln Leu Trp Ile Phe Val Cys Ala Gly Ile Met Phe Ile
        195
                            200
Ser Ser Leu Leu Ile Val Phe Ile Ser Tyr Thr Phe Ile Ile Ser Ala
                        215
Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Met Leu Ala Val Thr Ile Phe Tyr Gly Thr Leu Ile
                245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Asn His Ser Leu Asp Thr Asp Lys
                                265
                                                     270
Met Ala Ser Val Phe Tyr Thr Val Ile Ile Pro Met Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Lys Lys Leu
   290
                        295
Ile Ala Ser Lys Asn Gln Met Leu Ser Ser
```

<210> 1414 <211> 312

<212> PRT <213> Mus musculus

<400> 1414

Met Ala Thr Glu Asn Cys Thr Val Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Arg Ala Glu Leu Lys Met Met Leu Phe Val Leu Phe Leu Val Ile Tyr Ala Val Thr Leu Leu Gly Asn Leu Gly Met Ile Leu Leu Ile Arg Ile Thr Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser Cys Leu Ser Phe Val Asp Ala Cys Tyr Ser Ser Val Ile Ala Pro Lys 70 75 Met Leu Ile Ser Phe Leu Val Val Thr Glu Thr Ile Ser Phe Ser Ala 90 Cys Ile Met Gln His Leu Phe Phe Gly Val Leu Val Thr Thr Glu Gly 105 Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Val Val Asn 120 Pro Leu Leu Tyr Thr Val Ser Met Ser Lys Gln Lys Cys Ile Met Met 135 140 Val Thr Gly Ser Val Ile Gly Gly Thr Ile Asn Ser Leu Thr His Thr 150 155 Ile Ser Leu Ser Lys Leu Ser Phe Cys Gly Pro Asn Ile Val Gly His 170 Phe Phe Cys Asp Ile Pro Ser Leu Leu Ile Leu Ser Cys Ser Asp Thr 180 185 190 Ser Met Asn Glu Phe Leu Leu Ile Phe Ser Gly Val Ile Ala Ile 195 200 Gly Thr Leu Leu Ile Val Phe Ile Ser Tyr Leu Phe Ile Ala Leu Ala 215 Ile Leu Arg Ile Arg Ser Ala Ser Gly Arg Gln Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ser

```
245
                                   250
Phe Asn Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Val Glu Gln Glu Lys
                               265
Val Val Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Met
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Ala Lys Arg Ala
                       295
Ile Glu Met Lys Ser Phe Ser Cys
<210> 1415
<211> 301
<212> PRT
<213> Mus musculus
<400> 1415
Met Ile Ile Asn Asn Gln Thr Ala Ile Pro Gln Phe Ile Leu Leu Gly
                                   10
Leu Pro Ile Leu Pro Glu Gln Gln Met Phe Tyr Ala Leu Phe Leu
                                25
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
                           40
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                       55
                                          60
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                   70
                                       75
Leu Leu Gln Asn Ile Gln Ser Gln Asp Pro Ser Ile Ser Tyr Ala Gly
                                   90
Cys Leu Thr Gln Met Tyr Phe Phe Met Val Phe Ala Asn Thr Glu Asn
           100
                               105
                                                  110
Val Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                          120
                                               125
Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu
                       135
                                          140
Val Val Leu Thr Trp Val Phe Thr Val Leu Tyr Ser Met Leu His Thr
                  150
                                       155
Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                   170
Phe Phe Cys Asp Ile Ser Val Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                               185
                                                   190
Tyr Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Leu Asp Ile Val
       195
                           200
                                               205
Ile Pro Phe Ile Leu Ile Val Val Ser Tyr Val Gln Ile Val Cys Ser
                       215
                                           220
Ile Leu Lys Phe Ser Ser Thr Arg Gly Ile Ala Lys Val Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
               245
                                   250
Gly Val Tyr Ile Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Ile
                                                  270
                               265
Val Met Ala Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu
                       295
```

Ile Lys Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser

```
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                                                            80
                    70
                                        75
Met Leu His Asn Met Gln Ser Gln Asp Pro Ser Ile Pro Tyr Gly Gly
                85
                                    90
Cys Leu Ala Gln Ile Tyr Phe Leu Met Ala Phe Gly Asp Met Glu Ser
            100
                                105
Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Thr Cys Leu
                        135
                                            140
Met Leu Leu Trp Ile Leu Thr Thr Ser His Ala Met Met His Thr
                    150
                                        155
Leu Leu Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Ile Leu Asn
                                    170
                165
Phe Phe Cys Asp Leu Phe Ala Val Leu Lys Leu Ser Cys Ser Asp Thr
            180
                                185
Tyr Ile Asn Asp Leu Met Ile Leu Ile Phe Gly Gly Leu Ile Phe Ile
                            200
        195
Ile Pro Phe Leu Leu Ile Val Ile Ser Tyr Ala Arg Ile Ile Ser Ser
                        215
Ile Leu Lys Val Pro Ser Thr Gln Gly Ile Tyr Lys Val Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Lys Glu Ile
                                265
                                                    270
Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Lys Ala Leu Ile Arg Val
                        295
Ile Cys Ser Lys Lys Ile Ser Leu
<210> 1418
<211> 310
<212> PRT
<213> Mus musculus
<400> 1418
Met Asn Asn Lys Thr Val Ile Thr Gln Phe Leu Leu Gly Leu Pro
                                    10
Ile Pro Pro Glu Tyr Gln His Leu Phe Tyr Ala Leu Phe Leu Ala Met
            20
                                25
Tyr Leu Thr Thr Ile Leu Gly Asn Leu Leu Ile Ile Val Leu Ile Gln
                            40
Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu
Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu
                                        75
Gln Asn Met Gln Ser Gln Asp Pro Ser Ile Pro Tyr Gly Gly Cys Leu
                                    90
Ala Gln Ile Phe Phe Met Leu Phe Gly Asp Met Glu Ser Phe Leu
                                105
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
```

120

130

His Tyr Thr Ser Ile Met Ser Pro Lys Val Cys Thr Phe Leu Val Leu

125

```
Leu Leu Trp Ile Leu Thr Thr Ser His Ala Thr Met Gln Ile Leu Leu
                                         155
Thr Val Arg Leu Ser Phe Cys Glu Asn Asn Val Leu Leu Asn Phe Phe
                165
                                    170
Cys Asp Ile Phe Val Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Val
                                185
Asn Asp Leu Met Ile Leu Ile Met Gly Gly Leu Ile Ile Val Ile Pro
Phe Leu Leu Ile Val Ile Ser Tyr Ala Arg Ile Ile Ser Ser Thr Leu
                        215
Lys Val Pro Ser Thr Gln Gly Ile His Lys Val Phe Ser Thr Cys Gly
                    230
Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu
                                    250
Tyr Leu Cys Pro Ser Gly Asn Asn Phe Ser Leu Lys Gly Ser Ala Met
                                                     270
Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Ile Ile Gly
                        295
Ser Lys Lys Ile Ser Leu
```

<210> 1419 <211> 312

<212> PRT

<213> Mus musculus

<400> 1419

Met Ala Gly Asn Asn Gln Thr Phe Ile Leu Glu Phe Leu Phe Leu Gly Leu Pro Ile Pro Ser Glu Tyr Gln Leu Leu Phe Asn Ala Leu Phe Leu Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Leu Leu 40 Val Gln Leu Asp Ser His Leu His Met Pro Met Tyr Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys 70 75 Leu Leu Gln Asn Met His Ser Gln Val Pro Thr Ile Ser Tyr Ala Asp Cys Leu Thr Gln Leu Tyr Phe Phe Leu Val Phe Gly Asp Met Glu Ser 105 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe 120 125 Pro Leu His Tyr Thr Ser Ile Met Ser Thr Lys Leu Cys Val Ser Leu 135 140 Val Leu Leu Trp Met Leu Thr Ile Phe His Ala Leu Leu His Thr 150 155 Leu Leu Thr Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His 165 170 Phe Phe Cys Asp Leu Pro Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr 185 Phe Val Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Ile Ile Ser Ile 200 Ile Pro Phe Leu Leu Ile Gly Met Ser Tyr Val Arg Ile Phe Phe Ser 215 Ile Leu Lys Val Pro Ser Thr Gln Gly Ile His Lys Val Phe Ser Thr

```
230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Leu Lys Lys Thr
            260
                                265
Ala Met Ala Leu Met Tyr Thr Leu Val Thr Pro Met Leu Asn Pro Phe
        275
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Arg Ala Leu Ile Arg Val
                        295
                                            300
Ile Ser Ser Lys Lys Ile Ser Leu
                    310
<210> 1420
<211> 312
<212> PRT
<213> Mus musculus
<400> 1420
Met Ala Gly Lys Asn Gln Thr Leu Ile Leu Glu Phe Leu Leu Gly
                                    10
Leu Pro Ile Ser Ser Glu Tyr His Leu Leu Phe Tyr Ala Leu Leu Leu
            20
                                25
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Leu Leu
        35
                            40
Val Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Thr Ile Ser Tyr Ala Asp
                                    90
Cys Leu Thr Gln Leu Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser
Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                            120
                                                125
Pro Leu His Tyr Thr Ser Ile Met Ser Thr Lys Phe Cys Ala Leu Leu
Val Leu Leu Trp Met Leu Thr Ile Ser His Ala Leu Leu His Thr
                    150
                                        155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His
                165
                                    170
Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr
            180
                                185
                                                    190
Tyr Val Asn Glu Leu Met Ile Phe Ile Met Gly Gly Ile Ile Ser Ile
        195
                            200
Ile Pro Phe Leu Leu Ile Val Met Ser Tyr Val Arg Ile Phe Phe Ser
    210
                        215
Ile Leu Lys Val Pro Ser Ser Gln Asp Ile His Lys Val Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile Ile
                245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Asn Glu Ile
            260
                                265
Ser Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Arg Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val
                        295
                                            300
Ile Phe Ser Lys Lys Ile Ser Leu
                   310
```

```
<210> 1421
<211> 311
<212> PRT
<213> Mus musculus
<400> 1421
Met Asp Leu Gly Thr Leu Gly Asn Asp Ser Cys Val Ser Thr Phe Val
Leu Leu Gly Leu Thr Glu Thr Pro Val Leu Arg Pro Ile Leu Phe Val
            20
Ile Phe Leu Leu Ala Tyr Val Ala Thr Leu Gly Gly Asn Phe Ser Ile
Leu Ala Ala Ile Ile Glu Pro Lys Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Gly Asn Leu Ser Met Leu Asp Val Gly Cys Ile Ser Val Thr
                                        75
Val Pro Ala Met Leu Lys His Phe Leu Ser Asn Asp Arg His Ile Pro
                                    90
Tyr Gly Ala Cys Leu Ser Gln Leu Phe Phe Phe His Leu Leu Ala Gly
            100
                                105
Ala Asp Cys Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Leu Ala
        115
                            120
Ile Cys His Pro Leu Thr Tyr Asn Thr His Met Ser Trp Arg Ile Gln
                        135
                                            140
Lys Ala Ser Val Cys Leu Ser Cys Val Phe Ser Phe Ser Asn Ala Leu
                    150
                                        155
Thr Gln Thr Val Ala Leu Ser Thr Leu Lys Phe Cys Gly Pro Asn Thr
                165
                                    170
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
                                185
Ser Ser Ile Gln Leu Asn Glu Gln Leu Leu Phe Val Ala Ala Ala Phe
        195
                            200
                                                 205
Met Gly Val Val Pro Leu Val Leu Ile Thr Val Ser Tyr Gly His Val
                        215
                                            220
Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala
                    230
                                        235
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Gly Ile Phe Tyr Gly
                245
                                    250
Thr Gly Val Phe Ser Tyr Met Arg Leu Gly Ser Val Glu Ser Ser Asp
                                265
Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Val Ile Ser Pro Met Leu
                            280
                                                 285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Gly Ala Leu
                        295
Trp Lys Val Leu Thr Gly Arg
305
<210> 1422
<211> 315
<212> PRT
<213> Mus musculus
<400> 1422
Met Glu Pro Gly Ala Trp Gly Asn Arg Thr Ala Val Thr Asp Phe Ile
```

Leu Leu Gly Leu Thr Gly Asn Val Arg Leu Gln Pro Ile Leu Phe Val

```
25
Val Phe Phe Phe Ala Tyr Ile Val Thr Val Gly Gly Asn Leu Ser Ile
                            40
Leu Ala Ala Ile Phe Val Glu Pro Lys Leu His Thr Pro Met Tyr Tyr
                        55
Phe Leu Gly Asn Leu Ser Leu Leu Asp Ile Gly Cys Ile Ser Val Thr
                    70
                                        75
Val Pro Pro Met Leu Val Cys Leu Leu Ala His Glu Cys Arg Val Pro
                                    90
Tyr Ala Ala Cys Ile Ser Gln Leu Phe Phe Phe His Leu Leu Ala Gly
                                105
Val Asp Cys His Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Leu Ala
        115
                            120
Ile Cys Gln Pro Leu Thr Tyr Ser Thr Arg Met Ser Arg Glu Val Gln
                        135
                                             140
Gly Thr Leu Val Gly Ile Cys Cys Thr Val Ser Phe Ile Asn Ala Leu
                    150
                                        155
Thr His Thr Val Ala Val Ser Val Leu Asp Phe Cys Gly Pro Asn Val
                                    170
                165
Val Asn His Phe Tyr Cys Asp Leu Pro Pro Leu Phe Gln Leu Ser Cys
            180
                                185
                                                     190
Ser Ser Ile Tyr Leu Asn Gly Gln Leu Leu Phe Val Gly Ala Thr Phe
                            200
                                                 205
Met Gly Val Val Pro Met Ile Leu Ile Ser Val Ser Tyr Ala His Val
    210
                        215
                                             220
Ala Ala Val Leu Arg Ile Arg Ser Thr Glu Gly Arg Lys Lys Ala
225
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Cys Ile Phe Tyr Gly
                245
                                    250
Thr Gly Phe Phe Ser Tyr Met Arg Leu Gly Ser Val Ser Ala Ser Asp
                                265
                                                     270
Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Ile Leu Ser Pro Met Leu
       275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Gly Ala Leu
                        295
Lys Arg Val Leu Thr Gly Lys Arg Tyr Pro Val
                    310
```

<210> 1423 <211> 308

<212> PRT

<213> Mus musculus

<400> 1423

Met Thr Glu Asp Asn Tyr Ser Leu Thr Thr Glu Phe Ile Leu Ile Gly 1 5 10 15 Phe Ser Asp His Pro Asp Leu Lys Ile Leu Leu Phe Leu Val Phe Ser 25 Thr Ile Tyr Leu Val Thr Met Val Gly Asn Leu Gly Leu Val Ala Leu 40 Ile Tyr Met Glu Pro Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly 55 Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr Pro Lys 70 Met Leu Glu Asn Phe Phe Ser Val Asn Lys Arg Ile Ser Leu Tyr Glu 90 Cys Met Ala Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Ala Asp Cys 105

```
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Gln Tyr His Thr Met Met Ser Lys Leu Cys Leu Gln Met
                        135
                                            140
Thr Thr Gly Ala Tyr Ile Ala Gly Asn Leu His Ser Met Ile His Ile
                   150
                                        155
Gly Phe Leu Phe Arg Leu Thr Phe Cys Arg Ser His Val Ile Lys His
                                    170
                                                        175
Phe Phe Cys Asp Val Leu Pro Leu Tyr Arg Leu Ser Cys Val Asp Pro
            180
                                185
Tyr Ile Asn Glu Leu Met Ile Leu Ile Phe Ser Gly Ser Val Gln Thr
                            200
Phe Ser Ile Ile Ile Val Leu Ile Ser Tyr Phe Cys Ile Ile Phe Thr
                                            220
                        215
Ile Phe Thr Met Lys Ser Arg Glu Gly Arg Ser Lys Ala Leu Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Leu Ser Val Ser Ile Phe Tyr Gly Ser Leu Leu
                245
                                    250
Tyr Thr Tyr Ile Arg Pro Ser Ser Ile Asn Glu Gly Asn Glu Asp Ile
Pro Val Ala Ile Phe Tyr Thr Leu Val Ile Pro Leu Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Asn Ala Ile Lys Arg Thr
   290
                       295
Met Asn Lys Gly
305
```

<210> 1424 <211> 309

<212> PRT

<213> Mus musculus

<400> 1424

Met Leu Glu Gly Asn His Thr Met Lys His Glu Phe Ile Leu Thr Gly Phe Thr Lys His Pro Glu Met Lys Gly Leu Leu Phe Ala Val Phe Phe Phe Ile Tyr Leu Ile Thr Met Ile Gly Asn Met Gly Leu Val Ile Leu 35 Ile Cys Thr Glu Arg Ser Leu His Thr Pro Met Tyr Ile Phe Leu Gly 55 Asn Leu Ala Phe Ile Asp Ser Cys Cys Ala Cys Ala Ile Thr Pro Lys 70 75 Met Leu Glu Asn Phe Phe Ser Glu Asp Arg Ile Ile Ser Leu Tyr Glu 90 Cys Met Ala Gln Phe Tyr Phe Leu Ser Thr Val Glu Thr Ala Asp Cys 105 Phe Leu Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Gln Tyr His Thr Met Met Ser Lys Lys Leu Cys Leu Gln Met 135 140 Ile Thr Gly Ala Phe Ile Val Gly Asn Leu His Ser Met Val His Val 155 150 Gly Leu Leu Phe Arg Leu Ala Phe Cys Gly Ser Asn Gln Ile Asn His 165 170 Phe Tyr Cys Asp Ile Leu Pro Leu Tyr Arg Leu Ser Cys Val Asp Pro 185 Tyr Val Asn Glu Leu Val Leu Leu Val Phe Ser Ala Pro Ile Gln Val

```
200
                                                205
       195
Phe Thr Ile Ser Cys Val Leu Ile Ser Tyr Leu Phe Ile Val Tyr Thr
                                            220
   210
                        215
Ile Phe Gln Met Lys Ser Lys Glu Gly Arg Ile Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Leu Ser Val Ser Leu Phe Tyr Gly Ser Leu Phe
                245
                                    250
Phe Ile Tyr Ile Lys Pro Asn Leu Leu Glu Glu Gly Asp Lys Asp Met
                                                     270
            260
                                265
Pro Ala Ala Ile Leu Phe. Thr Ile Val Val Pro Leu Leu Asn Pro Phe
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Val Leu Gln Lys Ile
    290
                        295
                                            300
Leu Gln Lys Asn Lys
305
<210> 1425
<211> 321
<212> PRT
<213> Mus musculus
<400> 1425
Met Val Glu Glu Asn His Thr Met Lys Arg Glu Phe Val Leu Thr Gly
                                    10
Phe Thr Asp His Pro Glu Met Lys Gly Leu Leu Phe Ala Val Phe Phe
            20
                                25
Phe Ile Tyr Leu Ile Thr Met Ile Gly Asn Met Gly Leu Val Ile Leu
        35
                            40
Ile Ser Lys Glu Arg Ser Leu His Thr Pro Met Tyr Ile Phe Leu Gly
                        55
Asn Leu Ala Phe Ile Asp Ser Cys Cys Ala Cys Ala Ile Thr Pro Lys
                    70
                                        75
                                                             80
Met Leu Glu Asn Phe Phe Ser Glu Asp Arg Ile Ile Ser Leu Tyr Glu
                                    90
Cys Met Ala Gln Phe Tyr Phe Leu Cys Thr Val Glu Thr Ala Asp Cys
                                105
Phe Leu Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Gln Tyr His Thr Thr Met Ser Lys Leu Cys Leu Gln Met
                                             140
Thr Thr Gly Ala Phe Ile Ala Gly Asn Leu His Ser Met Val His Val
                    150
                                        155
Gly Leu Leu Phe Arg Leu Ala Phe Cys Gly Ser Asn Gln Ile Asn His
                165
                                    170
Phe Tyr Cys Asp Ile Leu Pro Leu Tyr Arg Leu Ser Cys Val Asp Pro
            180
                                185
Tyr Ile Asn Glu Leu Val Leu Phe Val Phe Ser Gly Ser Ile Gln Val
                            200
                                                 205
Phe Thr Ile Gly Cys Val Leu Ile Ser Tyr Leu Phe Ile Val Tyr Thr
                        215
Ile Phe Gln Met Lys Ser Lys Glu Gly Arg Ile Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ala Ser His Phe Leu Ser Val Ser Leu Phe Tyr Gly Ser Leu Leu
                                    250
                245
Phe Met Tyr Ile Arg Pro Asn Leu Leu Glu Glu Gly Asp Lys Asp Met
                                265
                                                     270
Pro Ala Ala Ile Leu Phe Thr Ile Val Val Pro Leu Leu Asn Pro Phe
                            280
                                                285
```

Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Val Leu Gln Lys Ile Leu Gln Lys Lys Ile Ile Ser Lys Asn Phe Lys Gln Ala Ser Ile Ile 310 315 Val <210> 1426 <211> 317 <212> PRT <213> Mus musculus <400> 1426 Met Met Lys Ala Asn His Ser Leu Thr Val Glu Phe Ile Leu Ile Gly 1 Phe Ser Asp His Thr Asp Leu Lys Thr Leu Leu Phe Leu Leu Phe Ser 25 Ala Ile Tyr Leu Val Thr Ile Val Gly Asn Leu Gly Leu Val Ala Leu 40 45 Ile Tyr Met Glu Pro Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly 55 60 Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr Pro Lys 70 75 Met Leu Glu Asn Phe Phe Ser Val Asp Arg Ile Ser Leu Tyr Glu 85 90 Cys Met Val Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Ala Asp Cys 105 100 110 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Gln Tyr His Ser Met Met Ser Lys Leu Ser Ile Gln Met 135 140 Ser Ile Gly Thr Phe Ile Ala Ser Asn Leu His Ser Leu Ile His Thr 155 150 Gly Cys Leu Leu Arg Leu Asn Phe Cys Lys Ser Arg Arg Ile Asp His 165 170 175 Phe Phe Cys Asp Ile Leu Pro Leu Tyr Lys Leu Ser Cys Thr Asp Pro 180 185 190 Phe Ile Asn Glu Leu Met Leu Tyr Ile Phe Ser Met Pro Ile Gln Val 200 205 Phe Thr Ile Thr Thr Val Leu Val Ser Tyr Ser Cys Ile Leu Leu Thr 215 220 Val Phe Lys Met Lys Ser Lys Asp Gly Arg Gly Lys Thr Phe Ser Thr 230 235 Cys Ala Ser His Phe Phe Ser Val Ser Ile Phe Tyr Ile Cys Leu Leu 250 245 Met Tyr Ile Gly Pro Ser Lys Asn Ser Asn Lys Asp Ile Pro Val Asp 265 260 270 Val Phe Tyr Thr Ile Val Ile Pro Leu Leu Asn Pro Phe Ile Tyr Ser 280 285

Leu Arg Asn Lys Glu Val Val Asn Ala Val Lys Lys Val Met Lys Thr

300

295

His Ser Ile Phe Lys Asn Ser Ser Ala Ser Ile Ala His

<210> 1427 <211> 308

<212> PRT

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<400> 1427
Met Ala Glu Asn Asn Tyr Ser Val Thr Asn Glu Phe Ile Leu Val Gly
1
Phe Ser Asp His Pro Asp Leu Lys Thr Pro Leu Phe Leu Val Phe Ser
Ala Ile Tyr Leu Val Thr Met Val Gly Asn Leu Gly Leu Val Ala Leu
                            40
Ile Tyr Met Glu Pro Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly
                        55
Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr Pro Lys
                                        75
                    70
Met Leu Glu Asn Phe Phe Ser Val Asp Arg Arg Ile Ser Leu Tyr Glu
                                    90
                85
Cys Met Val Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Thr Asp Cys
                                105
           100
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
       115
                            120
                                                125
Pro Leu Gln Tyr His Ser Met Met Ser Lys Leu Cys Leu Gln Met
                        135
                                            140
Thr Met Gly Ser Tyr Ile Ala Gly Asn Leu His Pro Met Ile Glu Val
                   150
                                        155
Gly Leu Leu Arg Leu Thr Phe Cys Arg Ser His Val Ile Lys His
                165
                                    170
                                                        175
Phe Phe Cys Asp Val Leu Pro Leu Tyr Arg Ile Ser Cys Thr Asp Pro
            180
                                185
                                                    190
Asn Ile Asn Glu Leu Ile Leu Leu Val Leu Ala Gly Ser Ile Gln Val
                            200
       195
Phe Thr Ile Ser Ile Val Leu Val Ser Tyr Ser Cys Ile Leu Phe Thr
                                            220
                        215
Ile Phe Thr Met Lys Ser Lys Glu Gly Arg Gly Lys Ala Leu Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Leu Ser Val Ser Ile Phe Tyr Gly Ser Leu Leu
                245
                                    250
Phe Met Tyr Ala Gln Pro His Ser Ala Asn Glu Gly Asp Lys Asp Met
                                265
                                                    270
Pro Val Ala Ile Phe Tyr Thr Leu Ile Ile Pro Leu Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Asn Val Met Lys Lys Thr
                        295
Met Lys Arg Arg
305
<210> 1428
<211> 319
<212> PRT
<213> Mus musculus
<400> 1428
Met Arg Leu Glu Lys Thr Asn His Ser Leu Thr Thr Gln Phe Ile Leu
                                    10
Val Gly Phe Ser Asp His Pro Asp Leu Lys Thr Pro Leu Phe Leu Leu
Phe Ser Val Ile Tyr Leu Val Thr Met Val Gly Asn Leu Gly Leu Val
Ala Leu Ile Tyr Met Glu Pro Arg Leu His Thr Pro Met Tyr Ile Phe
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Leu Gly Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr
Pro Lys Met Leu Glu Asn Phe Phe Ser Val Asp Arg Lys Ile Ser Leu
Tyr Glu Cys Met Ala Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Ser
                               105
                                                   110
Asp Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile
                                               125
                           120
Cys Asn Pro Leu Gln Tyr His Ser Met Met Thr Lys Lys Leu Ser Ile
                       135
                                           140
Gln Met Ser Ile Gly Thr Phe Ile Ala Ser Asn Leu Ile Ser Ile Leu
                   150
                                       155
His Val Gly Cys Leu Leu Arg Leu Thr Phe Cys Lys Ser Asn Arg Ile
               165
                                   170
                                                      175
Asp His Phe Phe Cys Asp Ile Leu Pro Leu Tyr Arg Leu Ser Cys Thr
           180
                               185
                                                   190
Asp Pro Phe Ile Asn Glu Leu Met Ile Tyr Ile Phe Ser Met Pro Ile
       195
                           200
                                               205
Gln Phe Leu Thr Ile Thr Thr Val Leu Val Ser Tyr Phe Cys Ile Leu
                       215
                                           220
Leu Thr Ile Phe Lys Met Lys Ser Lys Asp Gly Arg Gly Lys Ala Leu
                   230
                                       235
Ser Thr Cys Ala Ser His Phe Phe Ser Val Ser Ile Phe Tyr Ala Cys
               245
                                   250
Leu Leu Met Tyr Ile Arg Pro Phe Asp Asp Ser Asn Lys Asp Ile Pro
                                                  270
           260
                               265
Val Ala Ile Phe Tyr Thr Ile Ile Ile Pro Leu Leu Asn Pro Phe Ile
                           280
Tyr Ser Leu Arg Asn Thr Glu Val Val Asn Ala Val Lys Lys Val Met
                    295
                                          300
Lys Ile Tyr Thr Ile Phe Lys Arg Ser Ser Ala Ser Ala Ala His
                    310
                                       315
```

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<210> 1429
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<400> 1429

(400) 1423															
Me 1	t Thr	Glu	Asp	Asn 5	Tyr	Ser	Leu	Ala	Thr 10	Glu	Phe	Ile	Leu	Ile 15	Gly
Ph	e Ser	Asp	His 20	Pro	Asp	Leu	Lys	Thr 25	Leu	Leu	Phe	Leu	Val 30	Phe	Ser
Al	a Ile	Tyr 35	Leu	Val	Thr	Met	Val 40	Gly	Asn	Leu	Gly	Leu 45	Val	Thr	Leu
Il	e Tyr 50	Ile	Glu	Pro	Arg	Leu 55	His	Thr	Pro	Met	Tyr 60	Ile	Phe	Leu	Gly
As 65	n Leu	Ala	Leu	Met	Asp 70	Ser	Cys	Cys	Ser	Cys 75	Ala	Ile	Thr	Pro	Lys 80
Me	t Leu	Glu	Asn	Phe 85	Phe	Ser	Val	Asp	Arg 90	Arg	Ile	Ser	Leu	Tyr 95	Glu
Су	s Met	Ala	Gln 100	Phe	Tyr	Phe	Leu	_	Leu	Ala	Glu	Thr	Thr 110	Asp	Cys
Ph	e Leu	Leu 115	Ala	Ala	Met	Ala	Tyr 120	Asp	Arg	Tyr	Val	Ala 125	Ile	Cys	Asn
Pr	Leu 130	Gln	Tyr	His	Ser	Met 135	Met	Ser	Lys	Lys	Leu 140	Cys	Ĺeu	Gln	Met
Th	r Thr	Gly	Ala	Tyr	Ile	Ala	Gly	Asn	Leu	His	Ser	Met	Ile	His	Ile

<211> 309

<212> PRT

<213> Mus musculus

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145
                    150
                                        155
Gly Phe Leu Phe Arg Leu Thr Phe Cys Arg Ser His Val Ile Lys His
                165
                                    170
                                                        175
Phe Phe Cys Asp Val Leu Pro Leu Tyr Arg Leu Ser Cys Val Asp Pro
            180
                                185
                                                    190
Tyr Ile Asn Glu Leu Met Ile Leu Ile Phe Ser Gly Ser Leu Gln Thr
       195
                            200
                                                 205
Phe Thr Ile Thr Ile Val Leu Ile Ser Tyr Phe Cys Ile Leu Phe Thr
                        215
                                            220
Ile Phe Thr Met Lys Ser Arg Glu Gly Arg Arg Lys Ala Leu Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Leu Ser Val Ser Ile Phe Tyr Gly Ser Leu Leu
                                    250
Tyr Met Tyr Ile Arg Pro Ser Ser Leu Asn Glu Gly Tyr Lys Asp Ile
                                265
                                                    270
Pro Val Ala Ile Phe Tyr Thr Leu Val Ile Pro Leu Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Asn Val Met Lys Arg Ala
                        295
Met Lys Lys Arg Leu
305
<210> 1430
<211> 307
<212> PRT
<213> Mus musculus
<400> 1430
Met Ala Glu Arg Asn Trp Thr Leu Val Thr Glu Phe Val Leu Thr Gly
Leu Thr Glu Arg Pro Glu Leu Gln Val Pro Leu Phe Leu Val Phe Leu
                                25
Ile Ile Tyr Leu Thr Thr Met Val Gly Asn Leu Gly Leu Ile Ala Leu
                            40
Ile Trp Lys Asp Pro His Leu His Thr Pro Met Tyr Val Phe Leu Ser
                        55
Ser Leu Ala Phe Ala Asp Val Cys Thr Ser Ser Ser Val Thr Pro Arg
                    70
                                        75
Met Leu Val Asn Phe Leu Ser Thr Asp His Glu Ile Ser Leu Val Glu
                                    90
Cys Phe Thr Gln Phe Tyr Phe Phe Cys Ser Ser Ala Thr Thr Glu Cys
                                105
            100
Phe Leu Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                 125
        115
Pro Leu Leu Tyr Pro Val Val Met Ser Asn Lys Leu Cys Thr Gln Phe
                        135
                                            140
Ile Val Val Thr Tyr Phe Ile Gly Val Leu Asn Ser Thr Ile His Val
                    150
                                        155
Gly Leu Leu Ile Arg Leu Thr Phe Cys Arg Ser Asn Val Ile Asp Tyr
                165
                                    170
Phe Tyr Cys Glu Ile Val Lys Leu Leu Thr Ile Ser Cys Thr Asp Pro
            180 \
                                185
Ser Ile Asn Met Leu Val Val Phe Ile Cys Ser Ile Phe Ile Gln Ala
                            200
Ser Thr Leu Ala Asn Ile Val Val Ser Tyr Thr Arg Val Leu Phe Ala
```

Ile Leu Arg Lys Lys Ser Glu Lys Gly Arg Ser Lys Ala Phe Ser Thr

230

220

```
Cys Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe
Leu Ile Tyr Ile Leu Pro Gly Ser Glu Pro Ala Glu Asp Lys Glu Gln
                                265
                                                    270
Leu Leu Ser Ile Val Tyr Thr Ile Ile Ile Pro Leu Leu Asn Pro Phe
Ile Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Leu Arg Arg Leu
                       295
Ile Lys Lys
<210> 1431
<211> 308
<212> PRT
<213> Mus musculus
<400> 1431
Met Ala Glu Gly Asn Arg Thr Leu Val Thr Glu Phe Ile Leu Met Gly
Leu Thr Asp His Pro Thr Leu Lys Ala Ala Leu Phe Pro Leu Phe Leu
                                25
Val Ile Tyr Leu Ile Thr Met Val Gly Asn Leu Gly Leu Ile Ala Leu
                           40
Ile Trp Lys Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
Ser Leu Ala Phe Ala Asp Ser Cys Thr Thr Ser Ser Val Thr Pro Arg
Met Ile Leu Asn Phe Leu Ser Thr Asn His Glu Ile Thr Leu Val Glu
                85
                                    90
Cys Phe Ala Gln Phe Tyr Phe Met Gly Ser Ser Ala Thr Thr Glu Cys
                                105
           100
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Asn
                           120
                                                125
Pro Leu Leu Tyr Pro Val Leu Met Ser Asn Arg Leu Cys Thr Gln Phe
                       135
                                            140
Ile Ala Val Ala Tyr Leu Leu Gly Ala Leu His Leu Ala Ile His Val
                   150
                                        155
Gly Leu Leu Arg Leu Thr Phe Cys Arg Ser Asn Ile Ile Gln Tyr
               165
                                    170
Tyr Tyr Cys Glu Ile Leu Gln Leu Phe Asn Ile Ser Cys Ile Asp Pro
                                185
                                                    190
           180
Thr Ile Asn Val Phe Val Leu Leu Ile Leu Ala Thr Ser Ile Gln Val
       195
                            200
Phe Thr Phe Val Thr Val Leu Val Ser Tyr Ile Arg Val Leu Phe Ala
                       215
                                            220
Ile Leu Arg Lys Lys Ser Asp Lys Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe
                                    250
                245
Leu Ile Tyr Val Cys Pro Gly Ser Gly Pro Val Gly Asp Lys Glu Lys
                                265
                                                    270
Met Leu Ser Leu Phe Tyr Thr Val Ile Ile Pro Leu Leu Asn Pro Phe
                            280
Val Tyr Ser Leu Arg Asn Lys Glu Val Ile Ser Ala Phe Arg Arg Val
   290
                      295
Met Lys Asn Thr
```

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<211> 318
<212> PRT
<213> Mus musculus
<400> 1432
Met Thr Glu Asp Asn Tyr Ser Leu Ala Thr Glu Phe Ile Leu Thr Gly
                                    10
Phe Ser Asp Tyr Pro Asp Leu Lys Ile Leu Leu Phe Leu Val Phe Ser
            20
                                25
Ala Ile Tyr Leu Val Thr Met Val Gly Asn Leu Gly Leu Val Ala Leu
        35
                            40
Ile Tyr Met Glu Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly
                        55
Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr Pro Lys
                    70
                                        75
                                                             80
Met Leu Glu Asn Phe Phe Ser Val Asp Arg Arg Ile Ser Leu Tyr Glu
                                    90
                                                         95
Cys Met Ala Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Ala Asp Cys
                                105
Phe Leu Leu Ala Ala Met Ala Asp Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Gln Tyr His Thr Met Met Ser Lys Leu Cys Leu Gln Met
                        135
Thr Thr Gly Ala Tyr Ile Ala Gly Asn Ile His Ser Met Ile Gln Ile
                    150
                                         155
Gly Phe Leu Phe Arg Leu Thr Phe Cys Arg Ser His Val Ile Lys His
                165
                                    170
                                                         175
Phe Phe Cys Asp Val Leu Pro Leu Tyr Arg Leu Ser Cys Val Asp Pro
            180
                                185
                                                     190
Tyr Ile Asn Glu Leu Met Ile Leu Ile Phe Ser Gly Ile Ala Gln Thr
        195
                            200
Phe Thr Ile Thr Ile Val Leu Ile Ser Tyr Phe Cys Ile Leu Phe Thr
                        215
                                             220
Ile Phe Thr Met Lys Ser Arg Glu Gly Arg Arg Lys Ala Leu Ser Thr
                    230
                                         235
Cys Ala Ser His Phe Leu Ser Val Ser Ile Phe Tyr Gly Ser Leu Leu
                245
                                    250
Tyr Met Tyr Ile Arg Pro Ser Ser Leu Asn Glu Gly Tyr Lys Asp Ile
                                265
                                                     270
Pro Val Ala Ile Cys Tyr Thr Leu Ile Ile Pro Leu Leu Asn Pro Phe
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Asn Val Met Lys Glu Gln
                        295
Cys Arg Asp Asn Cys Asn Ile Leu Lys Ser Phe Phe Glu Asn
                    310
<210> 1433
<211> 305
<212> PRT
<213> Mus musculus
<400> 1433
Met Glu Lys Asn Ser Thr Leu Met Thr Glu Phe Val Leu Arg Gly Ile
                                    10
                                                         15
Thr Asp Arg Pro Glu Leu Gln Val Pro Leu Phe Leu Val Phe Phe Phe
            20
                                25
```

<210> 1432

```
Ile Tyr Val Thr Thr Met Val Gly Asn Leu Gly Leu Ile Phe Leu Ile
Trp Lys Asp Pro His Leu His Thr Pro Met Tyr Leu Phe Leu Gly Asn
                        55
Leu Ala Phe Ala Asp Ala Cys Thr Ser Ser Ser Val Thr Pro Lys Met
                    70
Leu Met Lys Phe Leu Asn Lys Asn Asp Ile Ile Ser Arg Gly Glu Cys
                                    90
Phe Ala Gln Phe Tyr Phe Phe Cys Phe Ser Ala Thr Thr Glu Ile Phe
                                105
Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                            120
Leu Leu Tyr Leu Val Val Met Ser Lys Arg Leu Cys Thr Val Leu Ile
                                            140
Ser Leu Ser Tyr Ile Ile Gly Val Leu Asn Pro Ile Val His Val Gly
                    150
                                        155
Leu Leu Phe Arg Leu Thr Phe Cys Lys Ser Asn Val Ile Asp His Phe
                165
                                    170
Tyr Cys Glu Ile Met Pro Leu Tyr Ala Ile Ser Cys Thr Asp Pro Ser
                                185
                                                    190
Leu Asn Gly Leu Val Ala Phe Ile Phe Ala Ser Ser Ile Gln Ile Ser
       195
                            200
Thr Ser Val Thr Ile Val Val Ser Tyr Ala Arg Val Leu Phe Ala Val
                        215
Leu Asn Met Lys Ser Glu Arg Gly Arg Arg Lys Ala Phe Phe Thr Cys
                    230
Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Leu Phe
                                    250
Met Tyr Val Ser Pro Gly Ser Gly Ser Gly Lys Gln Lys Asp Lys Met
                                265
Tyr Ser Leu Phe Tyr Thr Val Val Ile Pro Leu Leu Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Leu Lys Lys Leu Ile
                        295
Lys
305
```

<210> 1434 <211> 306

<212> PRT

<213> Mus musculus

<400> 1434

 Met
 Glu
 Lys
 Asn
 Ser
 Thr
 Leu
 Leu
 Thr
 Glu
 Phe
 Val
 Leu
 Arg
 Gly
 Ile

 Thr
 Asp
 Arg
 Ser
 Glu
 Leu
 Gln
 Val
 Pro
 Leu
 Leu
 Leu
 Val
 Phe
 Phe
 Leu
 Arg
 Phe
 Leu
 Ile
 Phe
 Leu
 Ile
 Arg
 Ile
 Ile

```
115
                            120
Leu Leu Tyr Leu Val Val Met Ser Lys Arg Leu Cys Thr Val Leu Ile
                        135
                                            140
Ser Ile Ser Tyr Ile Ile Gly Phe Val Asn Cys Gly Leu Asn Ile Gly
                    150
                                . 155
Leu Leu Phe Arg Leu Thr Phe Cys Lys Ser Asn Ile Ile Asp His Phe
                165
                                    170
Tyr Cys Glu Ile Leu Gln Leu Tyr Thr Ile Ser Cys Thr Asp Pro Ser
           180
                                                    190
Leu Asn Thr Leu Val Val Phe Ile Cys Ala Ser Ser Ile Gln Ile Ser
                            200
       195
Thr Ser Val Thr Ile Ile Val Ser Tyr Ala Arg Val Leu Phe Ala Val
                                            220
Leu Asn Met Lys Ser Glu Arg Gly Arg Arg Lys Ala Phe Phe Thr Cys
                                        235
                    230
Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Leu Phe
                245
                                    250
Met Tyr Val Ser Pro Gly Ser Gly Ser Gly Lys Gln Lys Asp Lys Ile
                                                    270
            260
Tyr Ser Leu Phe Tyr Thr Val Val Ile Pro Leu Leu Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Leu Lys Lys Phe Ile
Lys Cys
305
<210> 1435
<211> 315
<212> PRT
<213> Mus musculus
<400> 1435
Met Leu Thr Gly Lys Ser Val Leu Asn Gln Ser Gly Thr Thr Glu Phe
                                    10
Val Phe Arg Val Phe Thr Thr Val Pro Glu Phe Gln Ala Leu Leu Phe
                                25
Leu Leu Phe Leu Leu Tyr Leu Met Ile Leu Cys Gly Asn Ala Ala
                            40
Ile Ile Trp Val Val Cys Thr His Ser Ala Leu His Thr Pro Met Tyr
Phe Phe Leu Ser Ser Leu Ser Val Leu Glu Ile Phe Tyr Thr Thr Asp
                                        75
Val Val Pro Leu Met Leu Ser Asn Ile Phe Gly Ala Gln Lys Pro Ile
                                    90
Ser Leu Ala Gly Cys Gly Thr Gln Met Phe Phe Phe Val Thr Leu Gly
            100
                                105
Ser Thr Asp Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val
        115
                            120
                                                125
Ala Ile Cys His Pro Leu His Tyr Ser Leu Ile Met Thr Lys Lys Leu
                        135
                                            140
Cys Val Gln Met Val Met Gly Ser Trp Ser Leu Ala Leu Phe Leu Ser
                    150
                                        155
```

Leu Gln Leu Thr Ala Leu Ile Phe Thr Leu Pro Phe Cys Gly His Asp

Gln Glu Ile Asn His Phe Leu Cys Asp Val Pro Pro Val Leu Arg Leu 185

Ala Cys Ala Asp Ile His Val His Gln Ala Val Leu Tyr Val Val Gly 200

170

190

205

```
      Ile
      Leu
      Val
      Leu
      Thr
      Val
      Pro
      Phe
      Leu
      Leu
      Ile
      Cys
      Ile
      Ser
      Tyr
      Val

      Phe
      Ile
      Ala
      Ser
      Thr
      Ile
      Leu
      Arg
      Met
      Arg
      Ser
      Ala
      Glu
      Gly
      Arg
      Gln
      240

      Arg
      Ala
      Phe
      Ser
      Thr
      Cys
      Ser
      Ser
      Ser
      His
      Leu
      Thr
      Val
      Val
      Leu
      Gln
      235
      240
      Leu
      Gln
      235
      240
      240
      Arg
      Arg
      Ser
      Arg
      Gln
      226
      235
      240
      240
      Arg
      Arg
      Pro
      Val
      Val
      Leu
      Gln
      226
      250
      250
      255
      255
      270
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<210> 1436 <211> 317 <212> PRT <213> Mus musculus

<400> 1436

Met Asn Met Asp Gln Gly Asn Gln Thr Ser Ile Ser Glu Phe Ile Leu 10 Leu Gly Leu Ser Asn Gln Ala Glu Lys Gln Lys Leu Ile Phe Val Ile 25 Phe Leu Ser Met Tyr Leu Val Thr Val Ile Gly Asn Ser Leu Ile Ile 40 Leu Ala Ile Gly Leu Asp Ile His Leu His Thr Pro Met Tyr Leu Phe 55 Leu Ala Asn Leu Ser Phe Ala Asp Ile Ser Ser Ser Thr Ser Val 75 Pro Lys Met Leu Met Asn Ile Gln Thr Asn Ser Gln Ser Ile Ser Tyr 8.5 90 Glu Gly Cys Ile Thr Gln Met Tyr Phe Ser Ile Val Phe Val Val Ile 105 110 Asp Asn Phe Leu Leu Gly Val Met Ala Tyr Asp Arg Tyr Val Ala Ile 125 120 Cys His Pro Leu Asn Tyr Thr Asn Ile Met His Pro Arg Phe Cys Leu 135 140 Leu Leu Ser Phe Cys Pro Trp Ala Leu Ser Asn Ile Val Ala Leu Thr 150 155 His Thr Leu Leu Ala Asn Gln Leu Ile Phe Cys Asn His Asn Thr Ile 170 165 Gln His Phe Phe Cys Asp Leu Ala Pro Leu Ile Lys Leu Ser Cys Ser 180 185 190 Asp Ala Met Ile Asn Glu Leu Val Lys Phe Val Val Gly Leu Ser Val 195 200 205 Ile Thr Phe Pro Phe Ala Leu Ile Leu Phe Ser Tyr Val Cys Ile Ile 215 220 Arg Asp Val Leu Arg Ile Ser Ser Thr Glu Gly Lys Trp Lys Ala Phe 230 235 Ser Thr Cys Gly Ser His Leu Thr Ile Val Phe Leu Phe Tyr Gly Thr 250 Ile Val Gly Val Tyr Phe Phe Pro Ser Ser Thr His Pro Glu Asp Thr 265 Asp Lys Ile Gly Ala Val Leu Phe Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Arg

```
290
                        295
Lys Leu Ile Asn Lys Ser His Leu Leu Pro Leu Met Ser
305
                    310
<210> 1437
<211> 310
<212> PRT
<213> Mus musculus
<400> 1437
Met Gly Gly Asn Gln Thr Leu Ile Thr Gln Phe Ile Leu Leu Gly Phe
1
                                    10
Pro Leu Ser Pro Arg Met Gln Met Leu Leu Phe Ala Leu Phe Ser Leu
Phe Tyr Ala Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile
                            40
Cys Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His
Leu Ala Ile Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Gln Met
                    70
Leu Val Asn Leu Met Asp Pro Ala Lys Pro Ile Ser Phe Ala Gly Cys
                                    90
Met Thr Gln Thr Phe Leu Phe Leu Thr Phe Ala His Thr Glu Cys Leu
            100
                                105
Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro
                            120
Leu Arg Tyr Thr Ala Ile Met Ser Trp Arg Val Cys Val Ile Leu Val
    130
                        135
                                            140
Leu Thr Ser Trp Ile Leu Gly Val Leu Leu Ala Leu Val His Leu Val
                    150
145
                                        155
Leu Leu Pro Leu Pro Phe Cys Gly Ser Gln Lys Val Asn His Phe
                                    170
               165
Phe Cys Glu Ile Ile Ala Val Leu Lys Leu Ala Cys Ser Asp Thr Arg
            180
                                185
                                                    190
Ile Asn Glu Leu Met Val Leu Ala Gly Ala Val Ser Val Leu Val Gly
        195
                            200
Pro Phe Ser Ser Ile Val Val Ser Tyr Ala His Ile Leu Cys Ala Ile
                        215
                                            220
Leu Lys Ile Lys Ser Gln Gln Gly Arg Gln Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Cys Val Val Gly Leu Phe Tyr Gly Thr Ala Ile Val
                245
                                    250
Met Tyr Ile Gly Pro Gln His Gly Lys Ser Asn Glu Gln Lys Lys Tyr
                                265
            260
                                                   270
Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Leu Lys Arg Thr Leu
                       295
Leu Lys Glu Asp Thr Ser
<210> 1438
<211> 313
<212> PRT
<213> Mus musculus
<400> 1438
```

```
Met Lys Arg Asp Asn Ala Thr Trp Val Ser Glu Phe Ile Leu Met Gly
Leu Ser Ser Asp Lys His Ile Gln Ala Gly Leu Phe Val Leu Phe Gly
Val Ile Tyr Leu Leu Thr Leu Leu Gly Asn Gly Leu Ile Val Leu Leu
Ile Ala Leu Asp Pro Arg Leu His Leu Pro Met Tyr Phe Phe Leu Cys
His Leu Ser Val Val Asp Ile Cys Tyr Thr Ser Ser Gly Val Pro Gln
                    70
Met Leu Ala His Phe Leu Met Glu Lys Lys Thr Ile Ser Phe Ala Leu
                                    90
Cys Gly Thr Gln Leu Phe Phe Ala Leu Thr Leu Gly Gly Thr Glu Phe
Leu Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asn
                            120
Pro Leu Arg Tyr Thr Val Val Met Asn Pro Arg Leu Cys Met Gly Leu
                        135
Ala Gly Val Ser Trp Phe Val Gly Val Val Asn Ser Ala Val Glu Thr
                    150
Ala Val Thr Met Ser Leu Pro Thr Cys Gly His Asn Val Leu Asn His
                165
                                    170
Val Ala Cys Glu Thr Leu Ala Leu Val Arg Leu Ala Cys Val Asp Ile
           180
                                185
Thr Leu Asn Gln Val Val Ile Leu Ala Ser Ser Val Val Val Leu Leu
        195
                            200
Val Pro Cys Ser Leu Val Ser Leu Ser Tyr Ala His Ile Val Ala Ala
                        215
Ile Met Lys Ile Arg Ser Thr Gln Gly Arg Arg Lys Ala Phe Glu Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Val Ser Met Ser Tyr Gly Met Ala Leu
               245
                                    250
Phe Thr Tyr Met Gln Pro Arg Ser Thr Ala Ser Ala Glu Gln Asp Lys
                                265
Leu Val Val Leu Phe Tyr Ala Val Val Thr Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Ser Arg Val
                        295
Leu Met Lys Asn Ile Glu Ser Lys Asn
<210> 1439
<211> 317
<212> PRT
<213> Mus musculus
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```
85
                                    90
Cys Ala Ala Gln Leu Phe Phe Ser Leu Gly Leu Gly Gly Ile Glu Phe
                                105
Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
                            120
Pro Leu Arg Tyr Ser Val Ile Met His Ala Gly Leu Cys Thr Arg Leu
                        135
Val Ile Thr Ser Trp Val Ser Gly Ser Ile Asn Ser Leu Val His Thr
                    150
                                        155
Ala Ile Thr Phe Gln Leu Pro Met Cys Thr Asn Lys Tyr Ile Asp His
                                    170
Ile Ala Cys Glu Thr Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
Ser Ser Asn Lys Ile Ala Ile Met Val Ser Ser Ile Val Leu Leu Met
                            200
        195
Thr Pro Phe Phe Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
                        215
Ile Leu Lys Ile Gln Ser Thr Glu Gly Arg Trp Lys Ala Phe His Thr
                                        235
                    230
Cys Ala Ser His Leu Thr Met Val Val Leu Cys Tyr Gly Met Ala Ile
                245
                                    250
Phe Thr Tyr Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys
                                265
Leu Met Ser Leu Phe Tyr Ala Ile Leu Thr Pro Met Leu Asn Pro Met
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
                        295
Leu Gly Lys Phe Ser Gly Phe Ala Ser Lys Leu Ala Thr
                    310
```

<210> 1440 <211> 304

<212> PRT

<213> Mus musculus

<400> 1440

Met Ala Arg Glu Asn Asn Val Thr Glu Leu Ile Ile Thr Gly Leu Phe 1 5 10 Gln Asp Pro Asn Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val 20 25 Tyr Leu Ala Thr Val Leu Gly Asn Gly Leu Ile Val Ala Met Val Ile 40 Val Ser Lys Ser Leu His Ser Pro Met Tyr Ile Phe Leu Ser Ser Leu 55 60 Ser Leu Val Glu Ile Cys Tyr Ser Ser Thr Val Val Pro Lys Phe Ile 70 75 Thr Asp Leu Leu Ala Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu 90 95 85 Ala Gln Ile Phe Phe His Phe Leu Gly Val Ala Glu Ile Phe Leu 100 105 Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Asn Ile Met Ser Arg Gln Val Cys His Val Leu Val Ala 135 140 Val Ser Trp Leu Gly Gly Phe Leu His Ser Ile Ile Gln Val Leu Ile 150 155 Ser Ile Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe 170

<210> 1441 <211> 305 <212> PRT

<213> Mus musculus

<400> 1441

Met Ala Asn Lys Asn Asn Val Thr Glu Leu Ile Phe Thr Gly Leu Phe 10 Gln Asp Pro Glu Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val 25 Tyr Leu Ala Thr Leu Leu Gly Asn Ser Leu Ile Leu Val Ala Val Ser 40 Ile Ser Lys Thr Leu His Ser Pro Met Tyr Phe Phe Leu Ser Ser Leu 55 60 Ser Leu Val Glu Ile Cys Tyr Ser Ser Thr Ile Val Pro Lys Phe Ile 70 75 Thr Asp Leu Leu Ala Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu 8.5 90 95 Thr Gln Ile Phe Phe Ser His Phe Phe Gly Val Val Glu Val Ile Leu 100 105 110 Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Asn Ile Met Ser Arg Gln Val Cys His Met Leu Val Ala 135 140 Gly Ser Trp Leu Gly Gly Phe Ile His Ser Ile Ile Gln Ile Ile Ile 150 155 Thr Ile Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe 165 170 175 Cys Asp Leu Gln Gln Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Met 180 185 190 Glu Gly Phe Ile Val Met Ala Asn Ser Gly Leu Ile Ser Ile Val Ser 195 200 Leu Phe Ile Leu Val Ser Ser Tyr Ala Val Ile Leu Ile Ser Leu Arg 215 220 Lys Arg Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser 230 235 His Ile Thr Val Val Ile Leu Phe Phe Val Pro Gly Ala Phe Ile Tyr 250 Met Arg Pro Ser Ser Thr Phe Thr Glu Asp Lys Leu Val Ser Val Phe 265 Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Ile Val Tyr Thr Leu Arg

```
280
Asn Thr Glu Met Lys Asn Ala Ile Arg Met Ser Trp Lys Gln Lys Asp
                        295
                                             300
Ser
305
<210> 1442
<211> 306
<212> PRT
<213> Mus musculus
<400> 1442
Met Glu Pro Arg Asn Asn Val Thr Tyr Phe Val Leu Leu Gly Leu Ser
                                    10
Glu Asn Pro Lys Val Gln Lys Gly Leu Phe Val Leu Phe Leu Leu Ser
            20
                                25
Tyr Val Leu Thr Met Val Gly Asn Leu Leu Ile Val Met Thr Val Thr
        35
Thr Ser Asn Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
                        55
Ser Phe Val Asp Ile Ile Tyr Ser Ser Ala Ile Ser Pro Lys Leu Ile
Ser Asp Leu Phe Phe Gly Gln Asn Thr Ile Ser Phe Lys Phe Cys Met
                                    90
Thr Gln Leu Phe Thr Glu His Phe Phe Gly Gly Ser Glu Val Phe Leu
            100
                                105
Leu Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
His Tyr Ser Thr Ile Met Lys Gln Trp Val Cys Val Val Leu Leu Ile
                        135
Leu Ser Trp Ile Gly Gly Phe Leu His Ser Val Ile Gln Leu Ser Thr
                    150
                                        155
Ile Tyr Gly Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Met
                165
                                    170
Cys Asp Met Tyr Pro Leu Leu Lys Leu Val Cys Ile Asp Thr Tyr Val
                                185
                                                     190
Ile Gly Leu Leu Val Met Ala Asn Gly Gly Leu Ile Cys Thr Val Val
        195
                            200
                                                 205
Phe Ile Leu Leu Ile Ser Tyr Gly Val Ile Leu Tyr Ser Leu Lys
                        215
Asn Leu Asn Gln Glu Gly Arg Trp Lys Ala Leu Ser Thr Cys Gly Ser
                    230
                                        235
His Ile Thr Val Val Val Ser Phe Phe Val Pro Cys Ile Phe Met Tyr
                245
                                    250
Ala Arg Pro Ala Lys Thr Phe Pro Ile Asp Lys Met Leu Ser Val Phe
                                265
                                                     270
Tyr Thr Val Ile Thr Pro Met Met Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Ser Glu Met Thr Asn Ala Met Lys Lys Leu Trp Arg Arg Lys Ile
   290
Ile Ser
305
<210> 1443
<211> 309
<212> PRT
<213> Mus musculus
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```
Met Glu Asn Gln Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
Glu Asn Pro Lys Met Gln Lys Ile Val Phe Ile Met Phe Phe Leu Ile
Tyr Ile Ile Ser Ile Thr Gly Asn Val Leu Ile Val Val Thr Ile Thr
Ser Thr Ser Leu Leu Glu Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu
Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Ser Thr Pro Lys Leu Ile
                    70
Ala Asp Ser Leu Cys Glu Lys Lys Thr Ile Pro Phe Asn Gly Cys Met
Thr Gln Ile Phe Gly Glu His Leu Phe Gly Gly Ala Glu Ile Ile Leu
                                105
Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Ala Thr Ile Met Ser Arg Arg Leu Cys Ser Leu Leu Val Gly
                        135
                                            140
Val Ser Trp Leu Gly Gly Phe Leu His Ala Thr Ile Gln Ile Leu Phe
                    150
                                        155
Ile Phe Gln Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Met
                165
                                    170
                                                        175
Cys Asp Leu Asn Pro Leu Leu Asn Leu Val Cys Thr Asp Thr His Thr
           180
                                185
                                                    190
Leu Gly Ile Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn
                            200
Phe Leu Leu Leu Val Ser Tyr Val Ala Ile Leu Arg Ser Leu Lys
                        215
Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ile Ser
                    230
                                        235
His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Phe Val Tyr
                245
                                    250
Met Arg Pro Val Ala Thr Leu Pro Ile Asp Lys Ala Val Ala Met Phe
           260
                                265
Tyr Thr Met Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Ala Gln Met Lys Asp Ala Ile Lys Lys Leu Gly Ser Thr Lys Ile
Leu Ser Ser Asn Lys
305
<210> 1444
<211> 310
<212> PRT
<213> Mus musculus
<400> 1444
Met Lys Gln Ile Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Gln Asn Pro Asp Val Gln Lys Leu Leu Val Ile Phe Ala Leu Ile
                                25
Tyr Ser Leu Thr Leu Ile Gly Asn Leu Leu Ile Ile Val Thr Val Ile
                            40
Ser Ser Pro Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Ser Phe Leu
```

Ser Phe Val Asp Gly Cys Cys Ser Ser Thr Met Ala Pro Lys Met Ile

<400> 1443

```
70
Phe Asp Leu Leu Ala Glu Arg Lys Thr Ile Ser Phe Asn Gly Cys Met
                                                         95
                                    90
Thr Gln Ile Phe Ala Glu His Phe Phe Gly Gly Val Glu Ile Ile Leu
           100
                                105
Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Met Ile Thr Met Asn Arg Arg Val Cys Gly Phe Leu Val Ser
                        135
                                            140
Thr Ala Trp Ala Gly Gly Phe Leu His Ala Leu Ile Gln Ile Leu Phe
                    150
                                        155
Met Val Trp Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Ile
                165
                                    170
Cys Asp Leu Phe Pro Leu Leu Lys Leu Ser Cys Thr Asp Asn His Ile
           180
                                185
                                                    190
Phe Gly Leu Phe Val Ala Ala Asn Ser Gly Leu Met Cys Met Leu Ile
        195
                            200
                                                205
Phe Ser Ile Leu Leu Thr Ser Tyr Val Leu Ile Phe Cys Ser Leu Lys
                        215
Thr His Ser Thr Glu Glu Gln Leu Lys Ala Leu Ser Thr Cys Ala Ser
                    230
                                        235
His Ile Thr Val Val Leu Leu Phe Phe Val Pro Cys Ile Phe Val Tyr
                245
                                    250
Leu Arg Pro Met Val Ile Phe Pro Phe Asp Lys Ala Val Ala Val Phe
            260
                                265
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Thr Glu Val Lys Asn Ala Met Arg Lys Leu Trp Asn Gln Arg Lys
                        295
Pro Gly Lys Arg Phe Thr
```

<210> 1445 <211> 308 <212> PRT

<213> Mus musculus

<400> 1445

Met Ala Asn Lys Asn Asn Ile Thr Glu Leu Ile Phe Thr Gly Leu Phe 10 Gln Asp Pro Glu Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val 25 Tyr Leu Ala Thr Leu Leu Gly Asn Ser Leu Ile Val Val Ala Val Ser 40 45 Ile Ser Lys Thr Leu His Ser Pro Met Tyr Phe Phe Leu Ser Ser Leu 55 Ser Leu Val Glu Ile Cys Tyr Ser Ser Thr Ile Val Pro Lys Phe Ile 70 75 Thr Asp Leu Leu Val Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu 90 Ala Gln Ile Phe Phe Ser His Phe Leu Gly Val Ala Glu Ile Leu Leu . 105 100 Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Asn Ile Met Ser Arg Gln Val Cys His Met Leu Val Gly 135 140 Gly Ser Trp Leu Gly Gly Leu Ile His Ser Ile Ile Gln Ile Ile Ile 150

```
Thr Ile Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe
                                    170
Cys Asp Leu Gln Pro Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Met
                                185
Glu Gly Val Val Met Ala Asn Ser Gly Leu Ile Ser Ile Ile Ser
                            200
Leu Phe Ile Leu Val Ser Ser Tyr Ala Ile Ile Leu Ile Ser Leu Arg
Lys His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser
                    230
                                        235
His Ile Thr Val Val Ile Leu Phe Phe Gly Pro Ala Thr Phe Leu Tyr
                                    250
Leu Arg Pro Ser Ser Ser Phe Thr Glu Asp Lys Leu Val Ala Val Phe
                                265
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu Arg
                            280
Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp Gly Lys Arg Asn
                        295
Pro Glu Thr Glu
305
```

<210> 1446 <211> 309 <212> PRT

<213> Mus musculus

<400> 1446

Met Ala Ala Ser Asn Val Thr Glu Ile Ile Phe Leu Gly Leu Ser Gln Tyr Gln His Val Gln Lys Val Ile Phe Val Met Phe Leu Leu Met Tyr Thr Ala Ile Val Leu Gly Asn Gly Leu Ile Val Val Thr Ile Val Ala Ser Lys Gly Leu Ser Ser Pro Met Tyr Phe Phe Leu Gly Tyr Leu Ser Phe Val Glu Val Cys Tyr Cys Ser Val Thr Ala Pro Lys Leu Ile 70 Phe Asp Ser Leu Leu Gln Arg Lys Ala Ile Ser Leu Gln Gly Cys Ile Thr Gln Ile Phe Phe Leu His Phe Phe Gly Gly Thr Glu Ile Phe Leu 105 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Val Thr Ile Met Asn Arg Arg Val Cys Gly Leu Leu Val Gly 130 135 Ala Ala Trp Ser Gly Gly Leu Leu His Ser Ala Gly Gln Thr Phe Leu 150 155 Ile Phe Gln Leu Pro Phe Cys Gly Pro Asn Ile Ile Asn His Tyr Phe 165 170 Cys Asp Val His Pro Val Leu Lys Leu Ala Cys Ser Asp Thr Phe Leu 180 185 190 Ile Ser Leu Leu Val Ile Ile Asn Gly Gly Ser Ile Ser Val Ile Ser 200 205 Phe Ala Val Leu Leu Ala Ser Tyr Val Val Ile Leu Asn Ser Leu Arg 215 220 Ser His Thr Ala Glu Gly Arg His Lys Ala Leu Ser Thr Cys Ala Ser 230 235 His Leu Ala Val Val Gly Leu Phe Phe Ile Pro Cys Ser Phe Val Tyr

```
245
                                    250
Met Arg Pro Cys Ile Thr Phe Pro Val Asp Lys Val Val Ala Val Phe
            260
                                265
                                                     270
Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Ile Ile Tyr Ser Phe Arg
                            280
                                                 285
Asn Thr Glu Val Lys Asn Ala Met Lys Arg Leu Val Gly Arg Lys Val
                        295
                                             300
Thr Trp Glu Glu Lys
305
<210> 1447
<211> 311
<212> PRT
<213> Mus musculus
<400> 1447
Met Glu Ile Arg Ser Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr
                                    10
Arg Asn Pro Ser Met Gln Lys Ile Val Phe Ala Val Phe Val Val Ile
                                25
Tyr Ile Ile Ser Met Val Gly Asn Val Leu Ile Val Val Thr Ile Thr
                            40
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu
Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Asn Thr Pro Lys Leu Ile
                    70
                                         75
Ile Asp Ser Leu His Glu Lys Lys Thr Ile Leu Phe Asn Gly Cys Met
                                    90
Thr Gln Val Phe Gly Glu His Phe Phe Gly Gly Ala Glu Gly Ile Leu
                                105
Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Thr Thr Ile Met Ser Arg Arg Val Cys Gly Leu Leu Val Gly
    130
                        135
                                             140
Val Val Trp Val Gly Gly Phe Leu His Ala Thr Ile Gln Ile Leu Phe
                    150
Ile Phe Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met
                165
                                    170
Cys Asp Leu Asn Pro Leu Leu Asn Leu Ala Cys Thr Asp Thr His Ile
                                185
                                                     190
Leu Gly Leu Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn
        195
                            200
Phe Leu Leu Leu Val Ser Tyr Val Val Ile Leu Arg Ser Leu Arg
                        215
Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Val Ser
                    230
                                         235
His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Phe Val Tyr
                245
                                    250
Met Arg Pro Ser Ala Thr Leu Ser Ile Asp Lys Ala Val Ala Val Phe
            260
                                265
                                                     270
Tyr Thr Met Ile Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg
        275
                            280
                                                 285
Asn Ala Gln Met Lys Asp Ala Ile Lys Lys Leu Cys Arg Trp Lys Asp
                        295
                                             300
Asp Val Ile Ser Ile Asn Lys
305
                    310
```

```
<212> PRT
<213> Mus musculus
<400> 1448
Met Asn Asp Thr Glu His Met Glu Asn Lys Arg Asn Val Thr Glu Phe
1
Ile Leu Ile Gly Leu Thr Gln Asn Pro Gln Met Gln Lys Val Val Phe
            20
                                25
Val Thr Phe Leu Leu Tyr Met Ile Thr Ile Ser Gly Asn Leu Leu
                            40
Ile Val Val Thr Ile Ile Asn Ser Gln Ala Leu Asn Ser Pro Met Tyr
    50
                        55
Phe Phe Leu Ser His Leu Ser Leu Ile Asp Thr Ile Tyr Thr Ser Ser
                    70
                                        75
Ser Ala Pro Lys Leu Ile Ala Asp Ser Leu Gln Glu Asn Lys Val Ile
                                    90
Ser Phe Asn Gly Cys Met Ala Gln Val Tyr Ala Glu His Ile Phe Gly
            100
                                105
Ala Thr Glu Ile Ile Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val
                            120
Ala Ile Cys Lys Pro Leu His Tyr Met Thr Ile Met Ser His Lys Leu
                        135
Cys Ile Leu Leu Val Gly Val Ala Trp Thr Gly Gly Phe Leu His Ala
                    150
                                        155
Thr Ile Gln Ile Leu Phe Thr Val Trp Leu Pro Phe Cys Gly Pro Asn
                165
                                    170
Ile Ile Asp His Phe Met Cys Asp Leu Tyr Pro Leu Leu Glu Leu Val
            180
                                185
Cys Met Asp Thr His Thr Leu Gly Leu Phe Val Ala Ala Asn Ser Gly
        195
                            200
Phe Ile Cys Leu Phe Asn Phe Leu Leu Met Gly Ser Tyr Val Ile
                        215
                                            220
Ile Leu Arg Ser Leu Lys Asn Tyr Ser Leu Glu Gly Arg Arg Lys Ala
                    230
                                        235
Leu Ser Thr Cys Val Ser His Ile Thr Val Val Val Leu Ser Phe Ile
                245
                                    250
Pro Cys Ile Phe Val Tyr Leu Arg Pro Val Thr Thr Leu Pro Ile Asp
            260
                                265
                                                    270
Lys Ala Val Ala Val Phe Tyr Thr Leu Val Ala Pro Leu Leu Asn Pro
        275
                            280
Leu Ile Tyr Thr Leu Arg Asn Ser Glu Val Lys Asn Ala Ile Lys Lys
   290
                        295
                                            300
Leu Trp Arg Lys Lys Ile
305
                    310
<210> 1449
<211> 301
<212> PRT
<213> Mus musculus
<400> 1449
Met Asn Asn Ile Thr Glu Phe Ile Leu Val Gly Leu Thr Gln Asn Met
1
                                    10
Glu Leu Gln Ile Phe Ser Phe Val Val Phe Phe Ile Val Tyr Leu Leu
                                25
Thr Leu Ala Gly Asn Leu Leu Ile Met Val Thr Ile Ser Ser Ser Lys
```

<210> 1448 <211> 310

```
40
Ala Leu Gly Ser Pro Met Tyr Phe Phe Leu Ser Phe Leu Ser Leu Ile
                        55
Asp Gly Cys Cys Ser Ser Ser Met Thr Pro Lys Met Leu Ala Asp Ser
                    70
                                        75
Leu Ser Val Arg Lys Thr Ile Ser Phe Ser Gly Cys Met Thr Gln Val
                85
                                    90
Phe Ala Glu His Phe Phe Gly Ala Ala Glu Ile Ile Leu Leu Thr Val
                                105
                                                     110
            100
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg Tyr Thr
       115
                            120
                                                 125
Ile Ile Met Asn Arg Phe Val Cys Gly Leu Leu Val Gly Val Ala Trp
   130
                        135
                                             140
Ala Gly Gly Phe Ile His Ala Thr Ile Gln Ile Leu Phe Thr Val Trp
                    150
                                        155
                                                             160
Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met Cys Asp Leu
                165
                                    170
                                                         175
Thr Pro Leu Leu Lys Leu Val Cys Met Asp Thr His Asn Leu Gly Leu
            180
                                185
                                                     190
Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn Phe Leu Leu
       195
                            200
                                                 205
Leu Met Ile Ser Tyr Ile Val Ile Leu Asp Ala Leu Lys Ser His Ser
                        215
                                             220
Lys Glu Gly Arg Cys Lys Ala Leu Ser Thr Cys Val Ser His Ile Thr
225
                    230
                                        235
Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Val Tyr Leu Arg Pro
                245
                                    250
Val Ile Thr Phe Ser Ile Asp Lys Ala Val Ala Val Phe Tyr Thr Met
            260
                                265
                                                     270
Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Thr Glu
       275
                            280
Val Lys Asn Ala Met Lys Lys Leu Cys Ile Lys Val Asp
   290
                        295
```

<210> 1450 <211> 307 <212> PRT

<213> Mus musculus

<400> 1450 Met Ala Ser Val Asn Val Thr Glu Leu Ile Ile Thr Gly Leu Phe Gln Asp Pro Asp Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val Tyr Leu Ala Thr Val Leu Gly Asn Gly Leu Ile Val Val Thr Ile Ser Val Ser Lys Ser Leu Asn Ser Pro Met Tyr Ile Phe Leu Ser Ser Leu Ser Ile Val Glu Ile Cys Tyr Ser Ser Thr Val Val Pro Lys Phe Ile Thr Asp Leu Leu Ala Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu Thr Gln Ile Phe Phe His Phe Leu Gly Val Ala Glu Ile Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Met Asn Ile Met Ser Arg Gln Val Cys His Met Leu Val Gly Gly

Ser Trp Leu Gly Gly Leu Ile His Ser Ile Ile Gln Ile Val Ile Thr 150 155 Ile Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe Cys 165 170 Asp Leu Gln Pro Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Met Glu 185 Gly Val Val Val Met Ala Asn Ser Gly Leu Ile Ser Ile Ile Ser Leu 200 Phe Ile Leu Val Ser Ser Tyr Ala Ile Ile Leu Ile Ser Leu Arg Lys 215 His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser His 230 235 Ile Thr Val Val Ile Leu Phe Phe Gly Pro Ala Thr Phe Leu Tyr Leu 250 Arg Pro Ser Ser Ser Phe Thr Glu Asp Lys Leu Val Ala Val Phe Tyr 265 Thr Val Ile Thr Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu Arg Asn 280 Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp Gly Lys Arg Asn Pro 295 300 Glu Thr Glu 305

<210> 1451 <211> 304 <212> PRT

<213> Mus musculus

<400> 1451 Met Ser Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro Asp Leu Gln Lys Leu Leu Phe Ile Val Cys Leu Ile Ile Tyr Leu Ile 20 Thr Leu Ala Gly Asn Met Leu Ile Ser Val Thr Ile Phe Ile Ser Pro 40 Ala Leu Ala Thr Pro Met Tyr Phe Phe Leu Ser Tyr Leu Ser Ile Ile 55 Asp Gly Phe Tyr Ser Ser Ser Ile Thr Pro Lys Met Ile Tyr Asp Leu 70 75 Ile Ser Glu Lys Ser Thr Ile Ser Phe Asn Gly Cys Met Thr Gln Leu Phe Ala Glu His Phe Phe Ala Ala Glu Ile Ile Leu Leu Ile Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Met 120 Thr Ile Met Asn Arg His Val Cys Ile Phe Leu Val Val Ala Ala Gly 135 Ile Val Gly Phe Val His Gly Met Ile Gln Thr Thr Phe Ile Ala Gln 150 155 Leu Pro Phe Cys Gly Pro Asn Ile Ile Asn His Phe Ile Cys Asp Leu 165 170 175 Ile Pro Leu Leu Glu Leu Ala Cys Thr Asp Thr His Thr Leu Gly Pro 180 185 Leu Ile Ala Ala Asn Ser Gly Ser Met Cys Leu Leu Ile Phe Ser Met 200 205 Leu Val Ala Ser Tyr Val Val Ile Leu Arg Ser Leu Arg Asn His Ser 215 220 Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser His Val Thr

```
230
                                        235
Val Val Leu Phe Phe Val Pro Cys Ser Tyr Leu Tyr Val Arg Pro
                245
                                    250
Val Ile Ser Phe His Ile Asp Lys Ile Val Ser Val Phe Tyr Thr Leu
            260
                                265
                                                     270
Val Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Glu Glu
                            280
Val Lys Arg Val Met Lys Lys Leu Leu Gly Ser Asn His Val Lys His
                        295
<210> 1452
<211> 314
<212> PRT
<213> Mus musculus
<400> 1452
Met Glu Asn Arg Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Gln Asn Pro Glu Gly Gln Lys Val Leu Phe Val Thr Phe Leu Leu Ile
Tyr Ile Val Thr Val Met Gly Asn Leu Leu Ile Met Val Thr Ile Met
                            40
Ala Ser Gln Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu
                        55
Ser Phe Ile Asp Thr Val Tyr Ser Thr Ser Ile Ala Pro Lys Met Ile
                                        75
Ile Asp Leu Leu Tyr Glu Thr Lys Thr Ile Ser Phe Arg Ala Cys Met
                                    90
Thr Gln Val Phe Ile Asp His Leu Phe Ala Gly Ala Glu Val Ile Leu
                                105
Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Leu Thr Ile Met Asn Arg Arg Val Cys Val Leu Met Leu Leu
                        135
Gly Ala Trp Ile Gly Gly Phe Leu His Ser Leu Ile Gln Phe Ile Phe
                    150
                                        155
Ile Tyr Gln Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp Ser Phe Val
                                    170
                165
Cys Asp Met Tyr Pro Leu Leu Lys Leu Ala Cys Thr Asn Thr Tyr Leu
            180
                                185
Ile Gly Leu Cys Met Ile Ala Asn Gly Gly Ala Ile Cys Thr Val Thr
                            200
Phe Leu Ile Leu Leu Val Ser Tyr Gly Val Ile Leu His Ser Leu Lys
                        215
Ala His Ser Leu Glu Gly Lys Arg Lys Ala Leu Tyr Thr Cys Ala Ser
                    230
                                         235
His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Phe Leu Tyr
                                     250
                245
Ala Arg Pro Thr Ser Thr Phe Pro Ile Asp Lys Ser Val Thr Val Val
                                265
Leu Thr Phe Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                                                 285
                            280
Asn Ala Glu Met Lys Asn Ala Met Lys Arg Leu Trp Ser Lys Lys Ser
                                             300
                        295
Ser Ser Ile Val Ser Gly Leu Tyr His Ser
```

310

```
<211> 305
<212> PRT
<213> Mus musculus
<400> 1453
Met Asn Val Thr Glu Phe Ile Leu Met Gly Leu Thr Gln Asn Pro Gln
                                    10
Leu Gln Arg Ile Leu Leu Met Leu Leu Ile Ile Tyr Ile Val Thr
            20
                                25
Val Thr Gly Asn Leu Leu Ile Val Gly Thr Ile Val Cys Ser Gln Thr
                            40
Leu Asn Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu Ser Leu Ile Asp
Ala Cys Tyr Ser Ser Ser Ile Ile Pro Lys Met Leu Ala Asp Leu Met
                    70
Ser Glu Arg Lys Thr Ile Ser Phe His Gly Cys Met Ile Gln Leu Phe
                                    90
Val Glu His Phe Leu Gly Ala Ser Glu Ile Val Leu Leu Val Val Met
                                105
Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Val Thr
                            120
Arg Met Asn His His Asn Cys Cys Val Leu Val Gly Val Cys Trp Ile
                        135
                                            140
Met Gly Phe Leu His Ser Phe Gly Gln Ile Leu Val Thr Leu Trp Ile
                    150
                                         155
Pro Phe Cys Gly Pro Asn Val Met Asp His Phe Cys Cys Asp Ile Phe
                                    170
Pro Leu Leu Gln Leu Ala Cys Ala Asp Thr Phe Leu Leu Gly Leu Leu
                                185
                                                     190
Ile Ala Ala Asn Gly Gly Val Ile Pro Val Ile Thr Phe Thr Met Leu
                            200
Leu Met Ser Tyr Ala Val Ile Leu Phe Ser Leu Arg Thr His Ser Thr
                        215
Ala Gly Arg Lys Lys Ala Leu Ser Thr Cys Ser Ser His Ile Thr Val
                    230
                                        235
Val Val Leu Phe Phe Val Pro Cys Ile Tyr Thr Tyr Met Arg Pro Val
                                    250
Thr Thr Phe His Thr Asp Lys Ala Ile Ala Val Phe Tyr Thr Leu Val
                                265
Thr Pro Met Leu Asn Pro Ile Ile Tyr Thr Val Arg Asn Ala Glu Val
                            280
Lys Asn Ala Ile Arg Met Ile Leu Lys Lys Asn Ser Ile Leu Asp Asn
                        295
                                             300
Lys
305
<210> 1454
<211> 323
<212> PRT
<213> Mus musculus
<400> 1454
Met Asn Arg Phe Tyr Phe Asn Ile Ser Leu Lys Thr Met Gln Asn Gln
                                    10
Ser Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Ser Gln Asn Pro Asn
Val Glu Asn Ile Leu Cys Val Val Phe Leu Phe Ile Tyr Leu Ala Thr
```

<210> 1453

```
40
Ile Gly Gly Asn Ile Met Ile Val Val Thr Ile Ile Tyr Ser Pro Ala
                        55
Leu Leu Ser Ser Pro Met Tyr Phe Phe Leu Ile Phe Leu Ser Leu Leu
65
Asp Ala Cys Thr Ser Ser Thr Val Thr Pro Lys Met Met Val Asp Leu
               85
                                    90
Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Cys Cys Met Thr Gln Leu
           100
                                105
                                                   110
Phe Ala Ile His Phe Phe Thr Gly Ile Glu Val Ile Ile Leu Ser Ala
       115
                           120
                                                125
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Ser
                       135
                                            140
Ser Ile Met Thr Arg Arg Leu Cys Gly Ile Leu Val Met Val Ser Trp
                   150
                                        155
Thr Gly Gly Phe Leu His Ser Leu Ile Gln Ile Ile Phe Thr Leu Gln
                                    170
               165
Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Leu Cys Asp Leu
           180
                                185
                                                   190
Phe Pro Leu Lys Leu Ala Cys Thr Asp Thr His Ile Phe Val Ile
       195
                            200
                                                205
Leu Val Phe Ser Asn Ser Gly Ser Ile Ser Ile Ile Ile Phe Ser Ile
                       215
                                            220
Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu Arg Ala His Ser
                   230
                                        235
Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser His Ile Thr
               245
                                    250
Val Val Leu Leu Phe Phe Val Pro Cys Phe Leu Ile Tyr Ala Arg Pro
                                265
           260
Pro Ser Ala Phe Ser Ser Glu Lys Asn Ala Phe Val Phe Ala Thr Ile
                            280
                                                285
Ile Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe Arg Asn Lys Glu
                                            300
                       295
Met Lys Asn Ala Ile Arg Lys Met Trp Lys Lys Leu Ile Val Val Ser
                   310
                                        315
His Asp Phe
```

<210> 1455 <211> 305 <212> PRT

<213> Mus musculus

<400> 1455

 Met
 Glu
 Glu
 Arg
 Asn
 Asn
 Val
 Thr
 Glu
 Phe
 Val
 Leu
 Leu
 Gly
 Leu
 Thr

 Gln
 Ser
 Pro
 Glu
 Gly
 Gln
 Lys
 Ile
 Leu
 Phe
 Val
 Val
 Phe
 Leu
 Val
 Phe
 Leu
 Val
 Phe
 Leu
 Val
 Thr
 Val
 Ile
 Val
 Thr
 Val
 Thr
 Val
 Thr
 Val
 Thr
 Val
 Thr
 Val
 Thr
 Val
 Val
 Thr
 Val
 Thr
 Val
 Thr
 Val
 Val
 Thr
 Val
 Val
 Thr
 Thr
 Val
 Thr
 Phe
 Leu
 Gly
 Tyr
 Leu
 Leu
 Tyr
 Leu
 Leu
 Tyr
 Leu
 Thr
 Thr
 Thr
 Thr
 Thr

```
Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Leu Thr Ile Met Asn Gln Arg Val Cys Val Leu Leu Leu Leu
                        135
Leu Ala Trp Phe Gly Gly Phe Leu His Ala Val Val Gln Leu Leu Phe
                    150
                                        155
Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Ile
                                    170
Cys Asp Met Tyr Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Tyr Val
            180
                                185
Ile Gly Leu Thr Val Val Ala Asn Asp Gly Ala Ile Cys Val Val Ile
                                                 205
                            200
Phe Met Leu Leu Val Ile Ser Tyr Gly Val Ile Leu His Ser Leu Lys
                        215
Asn Leu Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser
                    230
His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
Val Arg Pro Pro Ser Thr Leu Pro Ile Asp Lys Ser Leu Thr Val Phe
                                265
Tyr Thr Val Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Ala Glu Met Lys Asn Ala Met Arg Lys Leu Trp Ala Ser Lys Gly
Lys
305
<210> 1456
<211> 305
<212> PRT
<213> Mus musculus
<400> 1456
Met Gly Gln Ser Tyr Asn Val Thr Glu Phe Ile Phe Val Asp Leu Thr
Gln Asp Pro Ala Gly Lys Lys Ala Leu Phe Val Leu Phe Ser Leu Thr
            20
Tyr Ile Val Thr Met Leu Gly Asn Leu Leu Ile Ala Val Thr Val Ile
Ala Ser Pro Ser Leu Asn Ser Pro Met Tyr Phe Phe Leu Ala Cys Leu
Ser Val Leu Asp Ala Phe Tyr Cys Asn Thr Ile Ser Pro Asn Leu Ile
                    70
                                        75
Ile Gly Leu Leu Lys Asp Lys Asn Asn Ile Ser Phe Arg Ala Cys Met
                85
                                    90
Leu Gln Leu Phe Val Glu His Leu Phe Gly Gly Val Glu Val Phe Leu
            100
                                105
Leu Val Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Leu Thr Ile Met Asn Gln Arg Val Cys Ile Leu Leu Leu Leu
   130
                        135
Val Ala Gly Val Gly Gly Ile Leu His Ser Leu Ile Gln Val Leu Thr
                    150
                                        155
Val Tyr Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met
                165
                                    170
Cys Asp Met Asn Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Phe
```

180 185 190
Leu Gly Ile Thr Val Ile Ala Asn Gly Gly Val Ile Cys Val Gly Ile

```
195
                            200
                                                 205
Phe Thr Phe Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                        215
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                         235
His Ile Met Val Val Cys Phe Phe Ala Pro Cys Ile Phe Ile Tyr
                245
                                    250
Ala Arg Pro Val Ser Asn Phe Ser Ile Asp Lys Tyr Ile Ala Val Phe
            260
                                265
Tyr Thr Val Val Ser Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Ser Glu Met Lys Asn Ser Ile Lys Lys Leu Trp Cys Lys Thr Leu
Ala
305
<210> 1457
<211> 306
<212> PRT
<213> Mus musculus
<400> 1457
Met Gly Gln Asn His Asn Val Thr Glu Phe Ile Phe Val Gly Leu Ser
                                    10
Gln Asp Pro Ala Gly Gln Lys Val Leu Phe Val Leu Phe Ser Leu Thr
                                25
Tyr Ile Val Thr Met Phe Gly Asn Leu Leu Ile Ala Leu Thr Val Ile
                            40
Ala Ser Pro Ser Leu Asn Ser Pro Met Tyr Phe Phe Leu Ala Cys Leu
                        55
Ser Val Leu Asp Ala Leu Tyr Cys Asn Thr Ile Ser Pro Asn Leu Ile
                    70
                                        75
Ile Asp Leu Leu Tyr Asn Lys Lys Asn Ile Ser Phe Arg Ala Cys Met
                85
                                    90
Leu Gln Leu Phe Val Glu His Leu Phe Gly Gly Val Glu Val Phe Leu
            100
                                105
                                                    110
Leu Val Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Leu Thr Ile Met Asn Gln Arg Val Cys Ile Leu Leu Leu Leu
                        135
                                            140
Ile Ala Gly Val Gly Gly Ile Leu His Ser Leu Ile Gln Val Leu Thr
                    150
                                        155
Val Tyr Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met
                165
                                    170
Cys Asp Met Asn Gln Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Phe
            180
                                185
Leu Gly Ile Thr Val Met Ala Asn Gly Gly Val Ile Cys Val Gly Ile
                            200
                                                205
Phe Thr Phe Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                        215
                                            220
Thr His Ser Arg Glu Gly Arg His Lys Ala Leu Phe Thr Cys Ser Ser
                    230
                                        235
His Ile Met Val Val Cys Phe Phe Ala Pro Cys Ser Phe Ile Tyr
                                    250
Ala Arg Pro Val Ser Asn Phe Pro Val Asp Lys Tyr Ile Ala Val Phe
                                265
Tyr Thr Val Val Ser Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
```

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295
                                            300
Thr Thr
305
<210> 1458
<211> 310
<212> PRT
<213> Mus musculus
<400> 1458
Met Leu Asn His Ser Ser Val Thr Glu Phe Ile Leu Leu Gly Leu Ser
Gln Asn Ser Lys Val Glu Lys Val Leu Phe Val Ile Phe Leu Leu Ile
            20
Tyr Leu Ala Thr Ile Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile
Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ile Phe
                        55
Leu Ser Phe Leu Asp Ala Cys Thr Ser Ser Thr Val Thr Pro Lys Met
                                        75
Ile Val Asp Phe Phe Tyr Glu Lys Lys Thr Ile Ser Phe Glu Cys Cys
                                    90
Met Thr Gln Leu Phe Ala Val His Phe Phe Thr Gly Met Glu Val Ile
                                105
Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
                                                125
Leu His Tyr Ser Ser Ile Met Thr Arg Arg Leu Cys Gly Ile Leu Val
                        135
                                            140
Met Leu Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile
                    150
                                        155
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr
                165
                                    170
Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His
                                                   190
                                185
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
                            200
Ile Phe Ser Ile Leu Leu Val Ser Tyr Ser Val Ile Leu Phe Ser Leu
                        215
                                            220
Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                                        235
Ser His Ile Thr Val Val Leu Leu Phe Phe Val Ser Cys Ile Leu Ile
                                    250
Tyr Ala Arg Pro Ala Ala Phe Ser Ser Glu Lys Asn Ala Leu Val Phe
                                265
Ala Thr Ile Ile Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe Arg
                                           285
                            280
Asn Arg Glu Met Lys Asn Ala Ile Arg Lys Leu Trp Lys Arg Trp Lys
                        295
Val Val Ser Gly Asp Ile
<210> 1459
<211> 314
<212> PRT
<213> Mus musculus
```

Asn Ser Glu Met Lys Asn Ser Ile Lys Lys Leu Trp Cys Lys Thr Leu

```
<400> 1459
Met Gly Glu Thr Asn Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr
                                    10
Gln Asp Pro Thr Gly Gln Lys Ala Leu Phe Val Met Phe Leu Leu Val
Tyr Ile Val Thr Ile Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile
Ala Ser Pro Ser Leu Asn Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu
                        55
Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Leu Pro Lys Leu Leu
                                         75
Lys Asp Leu Val Cys Asp Lys Lys Thr Ile Ser Phe Thr Ala Cys Leu
                                    90
                                                         95
Val Gln Leu Phe Val Glu His Leu Phe Gly Gly Ala Glu Val Phe Leu
            100
                                105
Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
His Tyr Leu Thr Val Met Asn Gln Gln Val Cys Ile Ser Leu Leu Val
                        135
                                            140
Val Ala Trp Val Gly Gly Phe Ala His Ala Leu Val Gln Val Leu Ser
                    150
                                        155
Val Tyr Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Gly
                165
                                    170
                                                         175
Cys Asp Met Tyr Pro Leu Leu Ala Leu Val Cys Thr Asp Thr Tyr Phe
            180
                                185
                                                    190
Ile Gly Leu Thr Val Val Ala Asn Asn Gly Ala Met Cys Met Val Val
        195
                            200
                                                205
Phe Val Leu Leu Phe Ser Tyr Gly Ile Ile Leu Ser Ser Leu Lys
                        215
                                            220
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Ile Met Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                245
                                    250
Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Ser Ile Ser Val Phe
                                265
                                                     270
Tyr Thr Ala Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Ser Glu Ile Lys Asn Ser Met Gly Lys Leu Trp Ser Lys Met Ile
                        295
                                            300
Ser Ile Asp Arg Val Arg Ile Phe Ala Tyr
                    310
<210> 1460
<211> 314
<212> PRT
<213> Mus musculus
<400> 1460
Met Gly Gln Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Gln Asp Pro Ala Gly Gln Lys Val Leu Phe Ile Met Phe Leu Leu Ile
Tyr Ile Val Thr Ile Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu
                        55
Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Leu Pro Lys Leu Leu
                                        75
```

```
Thr Asp Leu Leu Cys Asp Lys Lys Thr Ile Ser Phe Thr Ala Cys Leu
Val Gln Leu Phe Val Glu His Leu Phe Gly Gly Ser Glu Val Phe Ile
                                105
Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Leu Thr Ile Met Asn Arg Gln Val Cys Ile Leu Leu Val
Val Ser Trp Ala Gly Gly Phe Ala His Ala Leu Leu Gln Val Ile Ser
                    150
Val Tyr Leu Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ala
                                    170
                165
Cys Asp Met Tyr Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Phe
            180
                                185
Leu Gly Leu Thr Val Val Gly Asn Asn Gly Ala Met Ser Ile Val Val
        195
Phe Ile Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Ile Met Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                245
Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Tyr Ile Thr Val Phe
            260
                                265
Tyr Thr Val Phe Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Met Glu Ile Lys Asn Cys Met Ala Lys Leu Trp Cys Lys Met Phe
                        295
Thr Lys Asp Ile Lys Arg Asp Ser His His
```

<210> 1461 <211> 311 <212> PRT

<213> Mus musculus

<400> 1461

Met Met Phe Ser Pro Asn Gln Thr Glu Val Thr Glu Phe Ile Leu Glu Gly Phe Ser Glu His Ala Thr Leu Arg Leu Leu Thr Gly Cys Phe 25 Leu Ser Leu Tyr Thr Ile Ala Leu Met Gly Asn Ile Val Ile Ile Ala 40 Leu Val Thr Ser Ser Thr Gly Leu His Ser Pro Met Tyr Phe Phe Leu 55 Cys Asn Leu Ala Thr Met Asp Ile Val Cys Thr Ser Ser Val Ile Pro 75 Lys Ala Leu Ile Gly Leu Val Ser Glu Glu Asn Thr Ile Ser Phe Lys 85 90 Gly Cys Met Ala Gln Leu Phe Phe Leu Leu Trp Ser Leu Ser Ser Glu 100 105 110 Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 120 125 Phe Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly Ala 140 Leu Ala Val Gly Val Trp Ser Ile Cys Ala Val Asn Ala Ser Val His Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile Thr

```
165
                                    170
His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser Pro
            180
                                185
                                         190
Thr Tyr Ile Asn Ser Val Met Thr Leu Val Ala Asp Ala Phe Tyr Gly
        195
                            200
Cys Ile Asn Phe Val Leu Thr Leu Leu Ser Tyr Gly Cys Ile Ile Ala
                        215
                                            220
Ser Val Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser Val
                245
                                    250
Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg Ser
            260
                                265
Lys Val Thr Ser Val Leu Tyr Ser Ile Leu Ser Pro Thr Leu Asn Pro
        275
                            280
                                                285
Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly Arg
                        295
                                            300
Leu Leu Pro Phe Phe Pro Lys
305
                    310
<210> 1462
<211> 311
<212> PRT
<213> Mus musculus
<400> 1462
Met Met Leu Arg Leu Asn Gln Thr Glu Val Thr Glu Phe Val Leu Glu
                                    10
Gly Phe Ser Glu His Pro Asp Leu Arg Leu Phe Leu Ile Gly Cys Phe
                                25
Leu Thr Leu Tyr Ile Met Ala Leu Met Gly Asn Ile Leu Ile Ile Ala
Leu Val Thr Ser Ser Thr Gly Leu His Asn Pro Met Tyr Phe Phe Leu
                        55
Cys Asn Leu Ala Thr Thr Asp Ile Leu Cys Thr Ser Ser Val Ile Pro
                    70
Lys Ala Leu Val Gly Leu Val Ser Glu Glu Asn Thr Ile Ser Phe Lys
                85
                                    90
Glu Cys Met Ser Gln Leu Phe Phe Leu Ala Trp Ser Ala Ser Ser Glu
            100
                                105
Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
Cys Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Met Cys Gly Ala
                        135
                                            140
Leu Ala Met Gly Val Trp Ser Ile Ser Ala Val Asn Ala Ser Val His
                    150
                                        155
Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile Thr
                165
                                    170
His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser Pro
            180
                                185
                                                    190
Thr Tyr Val Asn Thr Ile Met Thr Leu Leu Gly Asp Ser Phe Phe Gly
        195
                            200
Gly Val Asn Phe Val Leu Thr Leu Leu Ser Tyr Gly Cys Ile Ile Ala
                        215
                                            220
Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser Val
```

```
Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg Ser
            260
                                265
Lys Val Thr Ser Val Leu Tyr Ser Ile Val Ser Pro Thr Leu Asn Pro
        275
                            280
Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly Arg
                        295
                                            300
Ile Leu Ala Ser Phe Ser His
<210> 1463
<211> 312
<212> PRT
<213> Mus musculus
<400> 1463
Met Met Met Leu Arg Leu Asn Gln Thr Glu Val Thr Glu Phe Val Leu
Glu Gly Phe Ser Glu His Pro Asp Leu Arg Leu Phe Leu Ile Gly Cys
                                25
Phe Leu Ser Leu Tyr Met Met Ala Leu Met Gly Asn Ile Val Ile Ile
Ala Leu Val Thr Ser Ser Thr Gly Leu His Ser Pro Met Tyr Phe Phe
                        55
Leu Cys Asn Leu Ala Thr Met Asp Ile Val Cys Thr Ser Ser Val Ile
                    70
Pro Lys Ala Leu Val Gly Leu Val Ser Gly Glu Asn Thr Ile Ser Phe
Lys Gly Cys Met Ala Gln Leu Phe Phe Leu Val Trp Ser Ala Ser Ser
            100
                                105
                                                    110
Glu Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile
                            120
                                                125
Cys Phe Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly
                        135
                                            140
Ala Leu Ala Val Gly Val Trp Ser Ile Cys Ala Leu Asn Ala Ser Val
                                        155
His Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Ile Ile
                                    170
Thr His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser
            180
                                185
                                                    190
Pro Thr Tyr Ile Asn Ser Val Met Thr Leu Val Ala Asp Ala Phe Tyr
        195
                            200
Gly Gly Ile Asn Phe Val Leu Thr Leu Leu Ser Tyr Gly Tyr Ile Ile
    210
                                            220
Gly Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe
                    230
                                        235
Ser Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser
                                    250
Val Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg
            260
                                265
Ser Lys Val Ser Ser Val Leu Tyr Ser Val Leu Ser Pro Thr Leu Asn
                            280
Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly
                        295
                                            300
Arg Ile Leu Pro Ser Phe Ser His
```

310

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<212> PRT
<213> Mus musculus
<400> 1464
Met Val Asp Leu Val Leu Ser Met Met Leu Asn Leu Asn Gln Thr
Glu Val Thr Glu Phe Val Leu Glu Gly Phe Ser Glu His Pro Gly Leu
                                25
Arg Leu Phe Leu Thr Gly Cys Phe Leu Ser Leu Tyr Met Met Ala Leu
Met Gly Asn Ile Leu Ile Ile Ala Leu Val Thr Phe Ser Thr Gly Leu
His Asn Pro Met Tyr Phe Phe Leu Cys Asn Leu Ala Thr Met Asp Ile
                    70
Ile Cys Thr Ser Ser Val Ile Pro Lys Ala Leu Val Gly Leu Val Ser
Glu Glu Asn Thr Ile Ser Phe Lys Gly Cys Met Ser Gln Leu Phe Phe
                                105
Leu Thr Trp Ser Ala Ser Ser Glu Leu Leu Leu Thr Val Met Ala
                            120
                                                 125
Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His Tyr Ser Ser Arg
                        135
                                            140
Met Ser Pro Gln Leu Cys Gly Ala Leu Ala Met Val Val Trp Phe Ile
                    150
                                        155
Glv Leu Val Asn Ala Cys Val His Thr Gly Leu Met Thr Arg Leu Ser
                                    170
                                                         175
Phe Cys Gly Pro Lys Val Ile Thr His Phe Phe Cys Glu Ile Pro Pro
            180
                                                    190
                                185
Leu Leu Leu Ser Cys Ser Pro Thr Tyr Val Asn Ser Ile Leu Thr
                            200
                                                205
Leu Val Ala Asp Ala Phe Phe Val Gly Ile Asn Phe Met Leu Thr Leu
                        215
                                            220
Leu Ser Tyr Gly Cys Ile Ile Ala Ser Ile Leu Arg Met Arg Ser Ala
                    230
                                        235
Glu Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val
                245
                                    250
Val Ser Val Tyr Tyr Ser Ser Met Phe Cys Ala Tyr Ile Ser Pro Ala
            260
                                265
                                                    270
Ser Ser Tyr Ser Pro Glu Arg Ser Lys Val Thr Ser Val Leu Tyr Ser
                            280
Ile Leu Ser Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys
                        295
                                            300
Asp Val Lys Leu Ala Leu Gly Arg Ile Leu Ala Ser Phe Ser His
                    310
<210> 1465
<211> 312
<212> PRT
<213> Mus musculus
<400> 1465
Met Met Leu Leu Ser Leu Asn Gln Thr Gly Val Thr Glu Phe Val Leu
                                    10
Glu Gly Phe Ser Glu His Pro Gly Leu Arg Leu Phe Leu Thr Gly Cys
                                25
Phe Leu Thr Leu Tyr Met Met Ala Leu Met Gly Asn Ile Val Ile Ile
```

<211> 319

```
Ala Leu Val Thr Ser Ser Thr Gly Leu His Asn Pro Met Tyr Phe Phe
Leu Cys Asn Leu Ala Thr Thr Asp Ile Val Cys Thr Ser Ser Val Ile
Pro Lys Ala Leu Ile Gly Leu Val Ser Glu Glu Asn Ile Ile Thr Phe
Lys Gly Cys Met Ala Gln Leu Phe Phe Leu Ala Trp Ala Thr Ser Ala
                                105
Glu Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile
                            120
Cys Phe Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly
                        135
Ala Leu Ala Val Gly Val Trp Ser Ile Ser Ala Val Asn Ala Ser Val
                    150
                                        155
His Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile
                165
                                    170
Thr His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser
           180
                                185
                                                    190
Ser Thr Tyr Ile Asn Ser Val Met Thr Leu Val Ala Asp Val Phe Leu
       195
                            200
                                                205
Gly Gly Ile Asn Phe Met Leu Thr Leu Leu Ser Tyr Gly Phe Ile Ile
                        215
                                            220
Ala Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe
                   230
                                        235
Ser Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser
                                    250
Val Phe Cys Ala Tyr Ile Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg
                                265
Ser Lys Phe Thr Ser Val Leu Tyr Ser Val Val Ser Pro Thr Leu Asn
                           280
Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly
                       295
Arg Met Leu Ala Ser Phe Ser His
```

<210> 1466

<211> 319

<212> PRT

<213> Mus musculus

<400> 1466

Met Val Leu Ser Asn Ile Thr His Phe Ser Pro Met Phe Tyr Leu Ser 10 Gly Phe Pro Gly Leu Glu Ala Ile Glu His Trp Ile Phe Ile Pro Phe 25 Phe Leu Met Tyr Leu Val Ala Ile Ser Gly Asn Cys Leu Ile Leu Ile 40 Ile Ile Lys Thr Ser Pro Arg Leu His Thr Pro Met Tyr Tyr Leu Leu 55 Ser Leu Leu Ala Leu Thr Asp Leu Gly Leu Ser Val Ser Thr Leu Pro 70 75 Thr Met Val Gly Ile Phe Trp Phe Asn Tyr His Gly Ile Tyr Phe Gly 90 Ala Cys Gln Ile Gln Met Phe Cys Ile His Ser Phe Ser Phe Met Glu 105 110 Ser Ala Val Leu Leu Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys 120 His Pro Leu Arg Tyr Ser Ser Ile Ile Thr Val Gln Arg Val Met Arg

```
130
                        135
Ala Gly Leu Cys Val Ile Leu Arg Gly Pro Val Ala Leu Ile Pro Ile
                    150
                                        155
Val Leu Leu Lys Asp Phe Pro Tyr Cys Gly Pro Leu Val Leu Ser
                165
                                    170
His Ser Phe Cys Leu His Gln Glu Val Ile His Leu Ala Cys Val Asp
                                185
                                                    190
Thr Thr Phe Asn Asn Leu Tyr Gly Leu Ser Leu Val Val Phe Thr Val
                            200
Met Leu Asp Leu Val Leu Ile Ala Leu Ser Tyr Gly Phe Ile Leu Tyr
                        215
                                            220
Thr Val Ala Gly Leu Ala Ser Gln Glu Glu Gln Ile Arg Ala Phe Gln
                    230
                                        235
Thr Cys Thr Ser His Leu Cys Ala Val Leu Val Phe Phe Val Pro Met
                                    250
Met Gly Leu Ser Leu Val His Arg Phe Gly Lys His Ala Pro Pro Ala
                                265
Val His Leu Leu Met Ala Asn Ile Tyr Leu Phe Val Pro Pro Met Leu
        275
                            280
Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Glu Ile Arg Lys Ala Ile
                        295
Ile Arg Phe Leu Gly Phe Arg Lys Val Asn Ser Glu Ser Trp Gly
```

<210> 1467

<211> 314

<212> PRT

<213> Mus musculus

<400> 1467

Met Met Glu Arg Glu Asn Tyr Thr Phe Asn Ser Asp Phe Ile Leu Leu Gly Leu Phe Ser Ser Ser Lys Ile Ser Leu Thr Phe Phe Ser Val Ile Phe Phe Ile Phe Ile Met Thr Ile Thr Glu Asn Ala Leu Met Ile Leu Leu Ile His Arg Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser His Leu Ser Phe Met Asp Ile Leu His Ile Ser Asn Ile Val Pro Lys Met Ile Ala Asp Phe Leu Ser Gly Ser Arg Thr Ile Ser Phe Ala Gly Cys Ala Phe Gln Ile Phe Leu Ser Leu Thr Leu Leu Gly Gly Glu Cys Leu Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Arg Asp Asn Phe Ser Arg Leu Leu Ala Ala Gly Ser Trp Leu Val Gly Ile Leu Asn Ser Ile Val His Thr Ala Phe Val Leu His Phe Pro Phe Cys His Ser Arg Ala Ile Asp His Phe Phe Cys Glu Val Pro Ala Met Leu Lys Leu Ser Cys Ile Asp Thr Thr His Tyr Glu Arg Gly Val Tyr Val Ser Gly Ile Ile Phe Leu Leu Ile Pro Phe Ser Met Ile Ser Ile Ser Tyr Val Gln Ile Leu Leu

<210> 1468 <211> 313 <212> PRT

<213> Mus musculus

<400> 1468 Met Met Glu Tyr Glu Asn Tyr Thr Phe Asn Asp Phe Ile Leu Leu Gly 10 Leu Phe Ser Ser Ser Lys Thr Ser Leu Thr Phe Phe Ser Val Ile Phe 25 Phe Ile Phe Ile Met Ala Ile Thr Glu Asn Ala Leu Met Ile Leu Leu 40 Ile His Arg Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser 60 55 His Leu Ser Phe Met Asp Ile Leu His Ile Ser Asn Ile Val Pro Lys 70 75 Met Ile Ala Asp Phe Leu Ser Gly Ser Arg Thr Ile Ser Phe Ala Gly 90 Cys Ala Phe Gln Ile Phe Leu Ser Leu Thr Leu Leu Gly Gly Glu Cys 100 105 110 Leu Leu Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu Cys Tyr Pro Val Leu Met Arg Asp Asn Phe Ser Arg Leu Leu 140 135 Ala Ala Gly Ser Trp Leu Val Gly Ile Leu Asn Ser Ile Val His Thr 150 155 Ala Phe Val Leu His Phe Pro Phe Cys His Ser Arg Ala Ile Asp His 170 175 Phe Phe Cys Glu Val Pro Ala Met Leu Lys Leu Ser Cys Ile Asp Thr 185 Thr His Tyr Glu Gln Gly Val Tyr Val Ser Gly Ile Ile Phe Leu Met 195 200 Val Pro Phe Ser Met Ile Ser Ile Ser Tyr Val Gln Ile Leu Leu Thr 215 220 Val Phe Gln Met His Ser Ser Gly Ala Arg Gln Lys Ser Phe Ser Thr 230 235 Cys Leu Phe His Met Val Val Ile Met Tyr Tyr Gly Pro Val Ile 250 Phe Thr Tyr Met Arg Pro Arg Ser Tyr His Thr Pro Gly Gln Asp Lys 265 Phe Leu Ala Ile Phe Tyr Thr Ile Leu Thr Pro Lys Leu Asn Pro Ile 280 Ile Tyr Ser Phe Arg Asn Lys Asp Val Leu Arg Ala Leu Lys Asn Ile Val Gln Ser Asn Ile Leu Asn Lys Lys

305 310

```
<210> 1469
<211> 309
<212> PRT
<213> Mus musculus
<400> 1469
Met Glu Ile Asn Asn Tyr Thr Thr Val Val Glu Phe Val Leu Gln Gly
Leu Ser Glu Asp Pro Gly Leu Gln Ala Leu Phe Leu Ala Phe Phe Leu
            20
Leu Leu Tyr Ile Leu Ala Leu Ala Gly Asn Thr Leu Ile Ile Ile Ala
Ile Ser Leu Asn Ser Ser Leu His Thr Pro Met Tyr Phe Phe Leu Ala
Asn Leu Ala Leu Leu Asp Ile Val Cys Thr Ser Thr Val Leu Pro Lys
                    70
                                        75
Leu Leu Glu Gly Leu Val Gly Lys Ser Ser His Ile Ser Tyr Lys Gly
                                    90
Cys Met Thr Gln Leu Phe Phe Leu Thr Trp Phe Leu Gly Ala Glu Leu
                                105
                                                    110
Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
                                                125
Pro Leu His Tyr Ser Met Leu Met Ser Trp Pro Ile Cys Val Leu Leu
                        135
                                            140
Ala Gly Ser Val Trp Val Ile Ser Ala Ala Ser Thr Ser Val His Thr
                    150
                                        155
Gly Leu Met Ala Arg Leu Asn Phe Cys Gly Pro Asn Gln Ile Arg His
                165
                                    170
                                                        175
Phe Leu Cys Glu Val Pro Thr Leu Leu Leu Ser Cys Ser Pro Thr
                                185
                                                    190
Thr Leu Asn Asn Ile Met Ile Val Ile Ala Asp Val Tyr Phe Gly Val
                            200
                                                205
Val Asn Phe Leu Leu Thr Met Ile Ser Tyr Ser Phe Ile Ile Thr Ser
                        215
                                            220
Ile Leu Arg Ile Arg Ser Thr Glu Gly Lys Lys Arg Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ala His Leu Val Val Val Leu Tyr Tyr Ser Thr Val Ile
                245
                                    250
Tyr Thr Tyr Leu Gln Pro Gly Ser Gly Ser Ser Leu Glu Asn Gly Lys
                                265
Val Val Ala Leu Leu Tyr Thr Ala Val Ser Pro Thr Leu Asn Pro Ala
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Lys Lys Leu
    290
Phe Pro Cys Phe Gln
305
<210> 1470
<211> 311
<212> PRT
<213> Mus musculus
<400> 1470
Met Met Ser Arg Leu Asn Gln Thr Val Val Thr Glu Phe Ile Leu Gln
                 5
```

```
Gly Phe Ser Glu His Pro Ser Leu Arg Leu Phe Leu Thr Gly Cys Phe
Leu Ser Leu Tyr Val Met Ala Leu Met Gly Asn Ile Leu Ile Ile Ala
Leu Val Thr Phe Ser Thr Gly Leu His Ser Pro Met Tyr Phe Phe Leu
                        55
Cys Asn Leu Ala Thr Met Asp Ile Ile Cys Thr Ser Ser Val Leu Pro
                    70
Lys Ala Leu Val Gly Leu Leu Ser Glu Glu Asn Thr Ile Ser Phe Lys
                85
                                    90
Gly Cys Met Ala Gln Leu Phe Phe Leu Val Trp Ser Leu Ser Ser Glu
                                105
Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
Phe Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly Ala
                        135
                                            140
Leu Ala Met Gly Val Trp Ser Ile Cys Ala Leu Asn Ala Ser Ile Asn
                    150
                                        155
Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile Thr
                                    170
His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser Pro
            180
                                185
Thr Tyr Val Asn Ser Ile Met Thr Leu Ile Ala Asp Val Phe Tyr Gly
                            200
Gly Ile Asn Phe Val Leu Thr Leu Leu Ser Tyr Gly Cys Ile Ile Ala
   210
                        215
Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser Val
                                    250
Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg Ser
Lys Val Thr Ser Val Leu Tyr Ser Phe Leu Ser Pro Thr Leu Asn Pro
                            280
Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Ile Gly Arg
                        295
                                            300
Leu Leu Pro Ser Phe Ser His
305
```

```
<210> 1471
```

<400> 1471

 Met
 Thr
 Met
 Leu
 Ser
 Pro
 Asn
 Gln
 Thr
 Val
 Val
 Thr
 Glu
 Phe
 Val
 Leu
 Leu
 Phe
 Val
 Leu
 Leu
 Arg
 Leu
 Phe
 Leu
 Met
 Gly
 Cys
 30
 Phe
 Leu
 Met
 Gly
 Cys
 30
 Phe
 Leu
 Ile
 Leu
 Ile
 Ile

<211> 312

<212> PRT

<213> Mus musculus

```
100
                                105
Glu Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile
       115
                            120
                                                125
Cys Tyr Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly
   130
                        135
                                           140
Val Leu Ala Met Ser Val Trp Ser Val Cys Ala Leu Asn Ala Ser Ile
                   150
                                        155
Asn Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile
                                    170
               165
Thr His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser
           180
                                185
                                                    190
Pro Thr Tyr Val Asn Ser Val Met Thr Leu Val Ala Asp Ala Phe Tyr
                            200
       195
                                                205
Gly Gly Ile Asn Phe Met Leu Thr Leu Leu Ser Tyr Gly Tyr Ile Ile
                        215
                                            220
Ala Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe
                    230
                                        235
Ser Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser
               245
                                    250
Val Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg
           260
                                265
Ser Lys Val Ser Ser Val Leu Tyr Ser Val Leu Ser Pro Thr Leu Asn
       275
                            280
                                               285
Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly
                        295
                                            300
Arg Arg Leu Pro Ser Phe Tyr His
                    310
```

<210> 1472

<211> 304

<212> PRT

<213> Mus musculus

<400> 1472

Met Asn Gly Thr Leu Val Thr Glu Phe Leu Ile Leu Gly Phe Ser Asp Met Pro His Leu Arg Ile Leu Leu Phe Leu Ser Phe Leu Cys Leu Tyr Met Ala Ala Val Ser Gly Asn Leu Leu Ile Met Val Thr Ile Ser Ala Ser Pro Thr Leu His Thr Pro Met Tyr Phe Phe Leu Val Asn Leu Ala Val Val Asp Ile Leu Cys Thr Ser Thr Ile Leu Pro Lys Leu Leu Asp Thr Met Val Gly Gly Arg Thr Ile Ser Tyr Gly Gly Cys Met Ala Gln 8.5 Leu Phe Phe Phe Thr Trp Ser Leu Gly Val Glu Leu Leu Phe Ser Ala Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Cys Pro Leu His Tyr Ser Thr Trp Met Gly Pro Arg Val Cys Ala Phe Leu Ala Gly Ile Val Trp Ala Ile Ser Leu Thr Asn Thr Ser Ile Asn Ser Ser Leu Val Leu Arg Leu Pro Phe Cys Ser Ser Asn Val Val Glu His Phe Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ser Cys Ala Pro Thr Gln Leu Asn Glu

```
Ala Met Ala Phe Ala Ala Asp Val Phe Leu Ala Val Gly Asn Phe Ser
Val Ile Ile Leu Ser Tyr Gly Phe Ile Val Ala Ser Ile Leu Lys Ile
                       215
Arg Ser Ala Glu Gly Lys Gln Arg Ala Phe Ser Thr Cys Ser Ala His
                   230
Leu Ile Val Val Thr Met Tyr Tyr Ser Thr Val Ile Tyr Thr Tyr Ile
               245
Arg Pro Ser Ser Tyr Ser Leu Asn Lys Asp Lys Val Val Ser Ile
                                265
Ile Tyr Thr Ser Val Ala Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu
                            280
Arg Asn Lys Asp Val Lys Val Ala Leu Arg Arg Leu Phe Ser Cys Cys
```

<210> 1473 <211> 312 <212> PRT

<213> Mus musculus

<400> 1473

Met Ser Asn Cys Ser Asn Asn Ala Leu Val Thr Glu Phe Ile Leu Leu Gly Phe Pro Glu Leu Cys His Leu Gln Gly Leu Leu Phe Gly Phe Phe 25 Leu Ile Ile Tyr Val Val Thr Val Leu Glu Asn Leu Val Ile Val Gly 40 Thr Ile Ser Ala Ser Arg Gln Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ala Asn Leu Ser Val Leu Glu Thr Leu Tyr Thr Thr Val Thr Val Pro 70 75 Lys Leu Leu Ala Asp Leu Leu Ala Gly Ala Lys Thr Ile Ser Phe Ser 85 90 Gly Cys Leu Thr Gln Leu Phe Leu Phe Leu Ser Leu Gly Ser Ser Glu 100 105 110 Cys Phe Leu Leu Ser Thr Met Ala Cys Asp Arg Tyr Leu Ala Ile Cys 115 125 120 Arg Pro Leu His Tyr Pro Ala Ile Met Asp Ser Lys Leu Cys Leu His 135 140 Leu Ala Leu Ser Ala Trp Leu Gly Gly Phe Leu Ala Ser Phe Val Ser 150 155 Thr Ala Leu Ile Ser Arg Leu Arg Phe Cys Gly Pro Asn Ala Leu Asn 165 170 175 His Phe Phe Cys Asp Ile Ser Pro Leu Leu Gln Leu Ser Cys Thr Asp 180 185 190 Thr Thr Ala Ile Glu Met Leu Asp Phe Val Ala Ala Leu Ala Val Leu 195 200 205 Ala Thr Ser Leu Ile Val Thr Ser Val Ser Tyr Val His Ile Ile Ala 215 220 Thr Val Leu Arg Ile Pro Gly Gly Ala Gly Arg Arg Lys Ala Phe Ser 230 235 Thr Cys Ala Ser His Leu Val Val Leu Ile Phe Tyr Thr Thr Thr 245 250 Thr Phe Met Tyr Ala Arg Pro His Ala Ile Ser Ser Phe Asp Leu Asn 260 265 270 Lys Leu Val Ser Val Ile Tyr Ser Val Val Thr Pro Leu Leu Asn Pro 280 Ile Ile Tyr Cys Leu Arg Asn Arg Asp Ile Arg Glu Ala Phe Thr Lys

295

310

```
<210> 1475
<211> 313
```

Leu Ser Gly Arg Leu Trp Ser Gln

<212> PRT

<213> Mus musculus

<400> 1475

```
Met Arg Arg Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly
Leu Pro Ile Gln Pro Glu Asp Gln Gly Leu Tyr Ser Ala Leu Phe Leu
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu
Ile Arg Leu Asp. Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ala Phe Thr Asp Val Ser Phe Ser Ser Val Thr Ala Pro Lys
                    70
Met Leu Met Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Ala Gly
Cys Val Ser Gln Val Tyr Phe Phe Ser Thr Phe Thr Asp Leu Asp Ser
                                105
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu His Tyr Thr Thr Ile Met Ser Gln Asn Leu Cys Val Leu Leu
                        135
Val Val Met Ser Trp Val Leu Ser Ser Ala Asn Ala Leu Val His Thr
                    150
                                        155
Leu Leu Ala Arg Leu Ser His Phe Arg Asn Asn Thr Ile Pro His
                165
                                    170
                                                        175
Tyr Phe Cys Glu Pro Ser Ala Leu Leu Ser Leu Ser Ser Ser Asp Thr
            180
                                185
                                                    190
Thr Ile Asn Glu Met Val Ile Leu Pro Leu Gly Thr Leu Val Ile Thr
        195
                            200
                                                205
Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Arg Ile Gly Val Thr
                        215
                                            220
Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Cys Leu Tyr Tyr Gly Ala Ile Ile
                245
                                    250
Gly Leu Tyr Leu Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Val
                                                    270
            260
                                265
Ile Val Ala Val Ile Tyr Ser Leu Val Thr Pro Met Val Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Leu Arg Asn Ile
                        295
Leu Asn Arg Arg Leu Cys Pro Gln Trp
```

```
<210> 1476
<211> 309
```

<400> 1476

 Met
 Arg
 Met
 Asp
 Asn
 Asp
 Ser
 Ala
 Leu
 Ser
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly
 10
 10
 10
 15
 Leu
 Gly
 15

 Leu
 Pro
 Ile
 Arg
 Ala
 Glu
 Asp
 Gln
 Ala
 Leu
 Tyr
 Ser
 Val
 Leu
 Ile
 Leu
 Ile
 Leu
 Ile
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 Ile
 Leu
 Ile
 Leu
 Ser
 He
 Ser
 Ser
 He
 Leu
 He
 Ile
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 Ile
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 Leu
 Ile
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 Leu
 Leu
 Leu
 Leu

<212> PRT

<213> Mus musculus

```
90
Cys Val Ser Gln Val Tyr Phe Phe Thr Val Phe Ala Ser Ile Asp Ser
            100
                                 105
                                                     110
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu His Tyr Asn Ile Ile Met Asn Leu Arg Leu Cys Val Leu Leu
                        135
                                             140
Val Val Ile Ser Trp Ala Leu Ser Leu Thr Asn Ala Leu Ala His Thr
                    150
                                        155
Leu Leu Leu Ala Arg Leu Ser His Phe Arg Asn Asn Thr Ile Pro His
                165
                                    170
Tyr Phe Cys Asp Leu Ser Thr Leu Leu Lys Leu Ser Ser Ser Asp Thr
            180
                                185
                                                     190
Thr Ile Asn Glu Leu Val Ile Phe Val Leu Gly Asn Val Val Ile Thr
                            200
Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Val Thr
                        215
Ile Leu Lys Thr Pro Ser Ile Lys Gly Ile His Lys Ala Leu Ser Thr
                    230
Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile
                245
                                    250
Gly Leu Tyr Phe Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Val
            260
                                265
                                                     270
Ile Val Ala Val Met Tyr Thr Val Val Ile Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Thr Leu Arg Asn Ile
Leu Ser Arg Thr Lys
305
```

<210> 1477 <211> 312 <212> PRT <213> Mus musculus

<400> 1477

Met Lys Arg Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly 10 Leu Pro Ile Arg Ala Glu Asp Gln Gly Leu Tyr Ser Ala Leu Phe Leu 25 Ala Met Tyr Leu Thr Thr Met Leu Gly Asn Leu Leu Ile Ile Leu Leu 35 40 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys 70 75 Met Leu Met Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Ala Gly Cys Val Ser Gln Met Tyr Phe Tyr Ile Val Phe Ala Asp Leu Glu Asn 105 110 Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu His Tyr Thr Thr Ile Met Ser Gln Ser Leu Cys Leu Phe Leu 135 140 Val Val Ser Trp Ala Leu Ser Ser Gly Asn Ala Leu Val His Thr 150 155 Leu Leu Leu Ala Lys Leu Ser His Phe Arg Asn Asn Thr Val Pro His 165 170

```
Tyr Phe Cys Asp Leu Ser Ala Met Leu Lys Leu Ser Ser Ser Asp Thr
            180
                                185
Thr Ile Asn Glu Leu Leu Ile Leu Thr Leu Gly Thr Met Val Thr Ile
        195
                            200
Pro Pro Phe Ile Cys Ile Leu Val Ser Tyr Val Arg Ile Gly Val Thr
                        215
Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr
                    230
                                         235
Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile
                245
                                    250
Ala Leu Tyr Phe Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Val
            260
                                265
                                                     270
Ile Val Ala Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Arg Asn Val
   290
                        295
                                             300
Leu Ser Arg Arg Leu Cys Ser Gln
                    310
```

<210> 1478 <211> 306 <212> PRT <213> Mus musculus

1220 1100 11100

<400> 1478 Met Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly Leu Pro Ile Arg Ala Glu Asp Gln Ala Val Tyr Ser Ala Leu Phe Leu Val Leu Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys Met Leu Val Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Ala Gly Cys Ile Ser Gln Glu Tyr Phe Phe Thr Val Phe Ala Gly Ile Asp Ser Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu His Tyr Ile Thr Ile Met Asn Gln Asn Leu Cys Val Leu Leu Val Val Val Ser Trp Ala Leu Ser Ser Ala Asn Cys Leu Val His Thr Leu Leu Leu Ala Cys Leu Ser His Phe Arg Asn Asn Thr Ile Pro His Tyr Phe Cys Asp Leu Ser Thr Leu Leu Lys Leu Ser Ser Ser Asp Thr Thr Ile Asn Gln Leu Val Ile Leu Val Leu Gly Asn Val Val Ile Ser Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Arg Ile Gly Val Thr Ile Met Lys Ala Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Phe Gly Ser Ile Ile Gly Leu Tyr Cys Val Pro Ser Ser Asn Asn Ile Asn Glu Asn Asn Ala Ile Val

260 265 Ser Val Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro Phe Ile Tyr 280 Ser Leu Arg Asn Arg Asp Ile Lys Arg Ala Leu Lys Asn Ile Leu Ser 290 295 Arg Lys 305 <210> 1479 <211> 312 <212> PRT <213> Mus musculus <400> 1479 Met Met Lys Ser Asn Gln Ser Thr Val Ser Glu Phe Ile Leu Leu Gly 10 Leu Pro Ile Gln Pro Glu Asp Gln Ala Val Tyr Phe Ala Leu Phe Leu 25 Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu 40 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys 70 75 Met Leu Met Asn Met Leu Thr His Ser Gln Ser Ile Ser His Ala Gly 90 Cys Val Ser Gln Ile Tyr Phe Phe Leu Leu Phe Gly Cys Ile Asp Asn 105 Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu His Tyr Thr Thr Ile Met Ser Gln Ser Leu Cys Val Leu Leu 135 140 Val Met Val Ser Trp Ala Phe Ser Ser Ser Asn Gly Leu Val His Thr 150 155 Leu Leu Phe Ala Arg Leu Ser Leu Phe Arg Asp Asn Thr Val His His 165 170 Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ser Ser Ser Asp Thr 180 185 190 Thr Ile Asn Glu Leu Val Ile Leu Thr Leu Ala Val Val Ile Thr 195 200 205 Val Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly His Ile Gly Ala Thr 215 220 Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr 230 235 Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile 250 Gly Leu Tyr Phe Phe Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Val 265 270 Ile Val Ala Val Leu Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Arg Asp Ile Asn Gly Ala Leu Arg Lys Thr 290 295 Leu Ser Arg Arg Leu Cys Ser His 310

Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu

```
Ser His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro
                    70
                                         75
Lys Met Leu Met Asn Met Leu Ile His Ser Gln Ser Ile Ser Tyr Ala
                                     90
Gly Cys Ile Ser Gln Val Tyr Phe Phe Leu Phe Phe Ala Asp Leu Asp
            100
                                 105
Ser Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
        115
                             120
His Pro Leu His Tyr Thr Arg Ile Met Ser Gln Ser Ile Cys Ile Leu
                        135
Leu Val Ile Glu Ser Trp Phe Leu Ser Phe Ala Gly Ala Leu Val His
                    150
                                         155
Thr Ile Leu Leu Ala Arg Leu Ser Phe Phe Arg Gly Asn Thr Val His
                                     170
His Phe Phe Cys Asp Leu Ser Ala Leu Ile Lys Leu Ser Ser Ser Asp
            180
                                 185
                                                     190
Thr Ser Ile Asn Glu Leu Val Ile Leu Val Val Gly Ser Leu Val Ile
        195
                            200
Thr Val Pro Phe Val Cys Ile Leu Val Ser Tyr Gly Arg Ile Gly Ala
                        215
Thr Ile Leu Lys Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser
                    230
                                         235
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Tyr Tyr Gly Ala Ile
                                     250
Ile Gly Leu Tyr Phe Val Pro Ser Ser Asn Asp Thr Asn Asp Lys Asp
            260
                                 265
                                                     270
Val Ile Val Ala Val Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro
                             280
                                                 285
Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Arg Asn
                        295
Met Leu Ala Arg Ala Thr Ser Ser Met
                    310
<210> 1482
<211> 312
<212> PRT
<213> Mus musculus
<400> 1482
Met Thr Glu Gly Asn Glu Ser Ile Val Ser Glu Phe Ile Leu Leu Gly
Leu Pro Ile Gln Pro Glu Asp Gln Asp Leu Tyr Ser Ala Leu Phe Leu
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                             60
His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys
                    70
                                        75
Met Leu Met Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Ala Gly
Cys Val Phe Gln Val Tyr Phe Phe Leu Phe Phe Ala Asp Leu Asp Asn
            100
                                105
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
```

115 120 125 Pro Leu His Tyr Thr Thr Met Met Ser Gln Asn Leu Cys Val Leu Leu

140

135

```
Val Val Val Ser Trp Thr Leu Ser Thr Ala Asn Ala Leu Val His Thr
Leu Leu Leu Ala Arg Leu Thr His Phe Arg Asp Asn Thr Ile Ser His
                                    170
Tyr Phe Cys Asp Leu Ser Thr Leu Leu Lys Leu Ser Ser Ser Asp Thr
Thr Thr Asn Lys Leu Val Ile Leu Leu Leu Gly Asn Val Ile Ile Thr
                            200
Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Leu Ile Ala Val Thr
Ile Leu Lys Ile Pro Ser Met Lys Gly Ile Cys Lys Ala Leu Ser Thr
                    230
Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile
                245
                                    250
Gly Leu Tyr Phe Val Pro Ser Ser Asn Asn Thr Asn Val Gln Asp Ala
                                265
Ile Val Ala Val Met Tyr Asn Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Gln Asp Met Lys Gly Ala Leu Arg Asn Ile
                        295
Leu Ser Arg Arg Leu Cys Leu Gln
                    310
```

<210> 1483 <211> 310

<212> PRT

<213> Mus musculus

<400> 1483

Met Glu Asn Glu Ser Ser Val Ser Glu Phe Phe Leu Gln Gly Ile Ser 10 Gly Phe Ser Glu Gln Gln Leu Leu Tyr Gly Leu Phe Leu Cys Met 25 Tyr Leu Val Thr Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile Gly 40 Ser Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu 55 Ser Phe Ala Asp Met Gly Leu Ile Ser Ser Thr Val Thr Lys Met Leu 70 75 Phe Asn Val Gln Thr Arg Cys His Thr Ile Ser Tyr Thr Gly Cys Leu 90 95 Thr Gln Met Tyr Phe Phe Leu Met Phe Gly Asp Leu Asp Ser Phe Leu 100 105 110 Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu 120 125 His Tyr Ser Thr Ile Met Ser Ala Arg Val Cys Ala Leu Met Leu Ala 135 140 Leu Cys Trp Val Leu Thr Asn Ile Val Ala Leu Thr His Thr Leu Leu 150 155 Met Ala Arg Leu Ser Phe Cys Val Val Gly Glu Ile Ala His Phe Phe 170 Cys Asp Ile Thr Pro Val Leu Lys Leu Ser Cys Ser Asp Thr His Val 185 190 Asn Glu Leu Met Val Phe Ala Leu Gly Gly Thr Val Leu Met Val Pro 200 Phe Val Cys Ile Val Ile Ser Tyr Ile His Ile Val Phe Ala Ile Leu Lys Val Arg Thr Pro Gly Gly Gly Thr Lys Ala Phe Ser Thr Cys Ser

```
230
225
                                         235
Ser His Leu Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Ala
                245
                                    250
Tyr Leu Cys Pro Pro Ser Val Val Ser Thr Glu Lys Asp Val Ala Ala
            260
                                265
                                                     270
Ala Ala Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Lys Arg Leu Leu Cys
                        295
                                             300
His Arg Lys Phe Leu Ser
<210> 1484
<211> 311
<212> PRT
<213> Mus musculus
<400> 1484
Met Glu Asn Gln Ser Ser Val Ser Glu Phe Phe Leu Arg Gly Ile Ser
Gly Phe Pro Glu Gln Gln Leu Leu Tyr Gly Leu Phe Leu Cys Met
Tyr Leu Val Thr Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile Ser
                            40
Cys Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu
                        55
Ser Phe Ala Asp Met Gly Leu Ile Ser Ser Ala Val Thr Lys Met Leu
                    70
                                        75
Phe Asn Val Gln Thr Gln Arg His Thr Ile Ser Tyr Thr Gly Cys Leu
                8.5
                                     90
                                                         95
Thr Gln Met Tyr Leu Phe Met Met Phe Gly Asp Leu Asp Ser Phe Phe
            100
                                105
Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu
                            120
                                                 125
His Tyr Ser Thr Ile Met Ser Ala Arg Val Cys Ala Leu Met Leu Ala
    130
                        135
                                            140
Leu Cys Trp Val Leu Thr Asn Ile Val Ala Leu Thr His Thr Leu Leu
                    150
                                         155
Met Thr Arg Leu Ser Phe Cys Val Val Gly Glu Ile Ala His Phe Phe
                                    170
Cys Asp Ile Thr Ser Val Met Lys Leu Ser Cys Ser Asp Thr His Val
            180
                                185
Asn Glu Leu Val Leu Ser Gly Phe Gly Gly Thr Val Leu Met Val Pro
                            200
Phe Val Ser Ile Val Ile Ser Tyr Val Arg Ile Val Phe Ala Val Leu
    210
                                             220
Arg Val Gln Thr Ser Gly Gly Ser Ser Lys Ala Phe Ser Thr Cys Ser
                    230
                                         235
Ser His Leu Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Val
                                    250
Tyr Leu Phe Pro Ser Ser Gly Glu Thr Thr Glu Lys Asp Val Val Ala
            260
                                265
                                                     270
Ala Ala Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                                 285
Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Lys Arg Leu Leu Cys
                        295
                                            300
His Arg Arg Lys Phe Ser Pro
                    310
```

```
<210> 1485
<211> 315
<212> PRT
<213> Mus musculus
<400> 1485
Met Ser Cys Ile Ile Arg Asn Asn His Ser Ile Thr Ser Glu Phe Ile
Leu Leu Gly Leu Pro Ile Asn Pro Glu Leu Asn Gly Met Tyr Ser Ala
            20
                                25
Leu Phe Leu Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile
                            40
Ile Leu Leu Ile Arg Leu Asp Pro His Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ser His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr
                    70
                                         75
Ala Pro Lys Met Leu Val Asn Met Leu Thr His Ser Gln Ser Ile Ser
                                     90
Tyr Thr Gly Cys Ile Ser Gln Val Tyr Phe Phe Leu Phe Phe Ala Asp
            100
                                105
                                                     110
Leu Asp Ser Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                 125
Ile Cys His Pro Leu His Tyr Thr Thr Ile Met Ser Gln Ser Leu Cys
    130
                        135
                                             140
Val Leu Leu Ile Val Ser Trp Val Leu Ser Phe Ala Ser Ala Ile
                    150
                                         155
Leu His Thr Leu Leu Leu Ala His Leu Ser Phe Ser Gly Gly Asn Thr
                                     170
Leu Pro His Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ser Ser
                                185
                                                     190
Ser Asp Thr Thr Ile Asn Glu Leu Val Ile Phe Thr Val Gly Val Val
                            200
Ile Ile Thr Val Pro Leu Ile Cys Ile Leu Val Ser Tyr Gly Tyr Ile
                        215
Gly Ala Thr Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Tyr Lys Ala
                    230
                                         235
Leu Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Tyr Tyr Gly
                245
                                     250
Ala Ile Ile Gly Leu Tyr Ser Phe Pro Ser Pro Asn Asn Ser Asn Asn
            260
                                265
Lys Asp Val Ile Val Ala Val Met Tyr Thr Met Val Thr Pro Met Leu
        275
                            280
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Leu
                        295
Arg Asn Ile Leu Gly Arg Lys Ala Ser Ser Gln
305
                    310
<210> 1486
<211> 317
<212> PRT
<213> Mus musculus
<400> 1486
Met Gly Lys Ile Ser Arg Val Asn Gln Ser Val Ala Ser Asp Phe Leu
```

Leu Leu Gly Leu Ser Glu Gln Pro Gly Glu Gln Pro Leu Leu Phe Gly

```
25
Ile Phe Leu Gly Met Tyr Leu Val Thr Met Val Gly Asn Leu Leu Ile
Ile Phe Val Ile Ser Ser Asp Ala His Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ala Asn Leu Ser Leu Thr Asp Ala Cys Phe Thr Ser Ala Ser
Val Pro Lys Met Leu Ala Asn Ile Tyr Thr Gln Ser Gln Thr Ile Ser
Tyr Ser Gly Cys Leu Thr Gln Leu Tyr Phe Leu Leu Met Phe Gly Gly
                                105
                                                     110
Leu Asp Asn Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                125
Ile Cys Gln Pro Leu His Tyr Ser Thr Ala Met Ser Pro Gln Leu Cys
                        135
                                            140
Ala Leu Met Leu Cys Thr Cys Trp Val Leu Thr Asn Cys Pro Ala Leu
                    150
                                        155
Met His Thr Leu Leu Thr Arg Val Ala Phe Cys Ala His Thr Ala
                165
                                    170
Ile Pro His Phe Tyr Cys Asp Pro Ser Ala Leu Leu Lys Leu Ala Cys
                                185
                                                     190
Ser Asp Thr His Ile Asn Glu Leu Met Ile Ile Thr Met Gly Leu Val
                            200
Phe Leu Ala Val Pro Leu Met Leu Ile Val Phe Ser Tyr Val Cys Ile
                        215
                                             220
Ser Trp Ala Val Leu Gly Ile Pro Ser Ser Gly Gly Arg Trp Lys Ala
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Leu Leu Phe Tyr Gly
                245
                                    250
                                                         255
Ser Leu Met Gly Val Tyr Leu Leu Pro Pro Ser Thr His Ser Thr Glu
                                265
Arg Glu Ser Arg Ala Ala Val Leu Tyr Met Ile Val Ile Pro Met Leu
                            280
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Met
                                            300
Gly Lys Leu Phe Gly Gly Gly Lys Thr Val Phe Leu Leu
                    310
<210> 1487
<211> 309
<212> PRT
<213> Mus musculus
<400> 1487
Met Arg Met Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly
Leu Pro Ile Arg Ala Lys Asp Gln Ala Val Tyr Ser Ala Leu Ile Leu
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu
        35
Ile Arg Leu Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ala Leu Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Arg
                    70
                                        75
```

Met Leu Val Asn Met Leu Thr Gln Ser Gln Ser Ile Ser Tyr Thr Gly

Cys Ile Ser Gln Val Tyr Phe Phe Ile Val Phe Gly Ser Ile Asp Ser

105

100

```
Phe Leu Leu Pro Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
        115
                            120
Pro Leu His Tyr Thr Leu Ile Met Asn Leu Asn Leu Cys Val Leu Leu
                        135
                                            140
Val Val Val Ser Trp Ala Leu Ser Leu Val Asn Ala Leu Val His Thr
Leu Leu Leu Ala Arg Leu Ser His Phe Arg Asn Asn Ile Ile Pro His
                                    170
Tyr Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ser Ser Ser Asp Thr
            180
                                185
Ser Ile Asn Glu Leu Val Ile Leu Val Leu Gly Asn Val Val Ile Thr
                            200
Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Val Thr
                        215
Ile Leu Lys Thr Pro Ser Thr Lys Gly Ile Arg Lys Ala Leu Ser Thr
                    230
Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ser Val Ile
                245
                                    250
Gly Leu Tyr Cys Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Ala
            260
Ile Val Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Arg Asn Ile
    290
                        295
Leu Ser Arg Lys Lys
305
```

<210> 1488 <211> 316 <212> PRT

<213> Mus musculus

<400> 1488

Met Pro Gly Gln Asn Tyr Ser Thr Ile Ser Glu Phe Ile Leu Phe Gly Phe Ser Ala Phe Pro His Gln Met Leu Pro Ala Leu Phe Leu Leu Tyr 25 Leu Leu Met Tyr Leu Phe Thr Leu Leu Gly Asn Leu Val Ile Met Ala Ala Ile Trp Thr Glu His Arg Leu His Thr Pro Met Tyr Leu Phe Leu 55 Cys Ala Leu Ser Ile Ser Glu Ile Leu Phe Thr Val Val Ile Thr Pro 70 Arg Met Leu Ser Asp Met Leu Ser Thr His Arg Ser Ile Thr Phe Ile 85 90 Ala Cys Ala Asn Gln Leu Phe Phe Ser Phe Thr Phe Gly Tyr Thr His 105 110 Ser Phe Leu Leu Val Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys 120 Arg Pro Leu His Tyr His Ala Leu Met Ser Leu Gln Gly Cys Ala Arg 140 Leu Val Ala Trp Ser Trp Ala Gly Gly Ser Leu Ile Gly Met Ala Leu 150 Thr Ile Ile Ile Phe His Leu Thr Phe Cys Glu Ser Asn Val Ile His 170 His Ile Leu Cys His Val Phe Ser Leu Leu Lys Leu Ala Cys Gly Glu 185 Arg Thr Ala Phe Val Thr Ile Ala Val Ile Leu Val Cys Val Thr Pro

```
195
                            200
Leu Ile Gly Cys Leu Val Phe Ile Ile Leu Ser Tyr Ile Phe Ile Val
                                            220
                        215
Ala Ala Ile Leu Arg Ile Pro Ser Thr Glu Gly Arg His Lys Thr Phe
                    230
                                        235
Ser Thr Cys Ala Ser His Leu Thr Val Val Ile Val His Tyr Gly Phe
                245
                                    250
Ala Ser Ile Ile Tyr Leu Lys Ser Arg Gly Leu Tyr Ser Gln Tyr Thr
                                265
Asp Thr Leu Met Ser Thr Thr Tyr Thr Val Phe Thr Pro Phe Leu Ser
        275
                            280
                                                285
Pro Ile Ile Phe Ser Leu Arg Asn Lys Glu Leu Lys Asn Ala Ile Ile
                        295
Lys Ser Phe His Arg Asn Val Cys Gln Gln Ser Ile
                    310
<210> 1489
<211> 315
<212> PRT
<213> Mus musculus
<400> 1489
Met Glu Glu Gly Asn Gln Thr Gly Met Val Leu Phe His Phe Arg Pro
1
                 5
                                    10
Phe Ser Lys Leu Pro Glu Val Gln Met Leu Ile Phe Val Leu Phe Leu
                                25
Met Met Tyr Leu Val Ser Ile Gly Gly Asn Met Ser Ile Val Leu Thr
        35
                            40
                                                4.5
Ile Trp Thr Asn Arg Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
                                            60
Asn Leu Ala Ser Leu Glu Ile Phe Tyr Ser Ser Thr Ile Ala Pro Leu
                    70
                                        75
Thr Leu Ala Ser Ile Leu Ser Thr Glu Arg Thr Val Val Ser Leu Ala
                8.5
                                    90
Gly Cys Gly Ala Gln Met Phe Phe Phe Ile Phe Leu Gly Ser Ala Asp
            100
                                105
                                                     110
Cys Ile Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
       115
                            120
                                                125
```

His Pro Leu Arg Tyr Thr Leu Ile Met Ser Trp His Leu Cys Val Gln Leu Ala Leu Gly Ser Leu Leu Leu Gly Phe Ile Leu Ala Met Gln Leu Thr Val Leu Ile Phe Arg Leu Pro Phe Cys Ser Ser Lys Glu Ile Ser Leu Phe Tyr Cys Asp Val Leu Pro Val Met Arg Leu Ala Cys Ala Asp Thr His Val His Glu Ala Thr Leu Phe Val Val Ser Val Ile Val Leu Thr Ile Pro Phe Leu Leu Ile Thr Leu Ser Tyr Val Phe Ile Val Asp Ala Ile Leu Lys Ile Arg Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Leu Leu Gln Tyr Gly Cys Gly Ser Leu Ile Tyr Leu Cys Pro Ser Ser Ser Tyr Ser Pro Glu Arg Gly Gln Val Val Ser Val Val Tyr Thr Phe Ile Thr Pro Val Leu Asn Pro

```
295
Val Val Ile Ser Phe Leu Leu Leu Glu Lys Gln
                    310
<210> 1490
<211> 312
<212> PRT
<213> Mus musculus
<400> 1490
Met Asp Ser Tyr Asn Gln Thr Phe Thr Gly Phe Ile Leu Leu Gly Leu
Phe Pro Pro Ser Lys Ile Gly Leu Phe Leu Phe Ile Leu Ile Val Leu
            20
Ile Phe Leu Thr Ala Trp Ile Gly Asn Leu Ser Met Ile Leu Leu Ile
                            40
Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Leu Leu Ser Gln
                                             60
Leu Ser Leu Ile Asp Leu Asn Tyr Ile Ser Thr Ile Val Pro Lys Met
                    70
                                         75
Val Ser Asp Phe Met Leu Gly Asn Lys Tyr Ile Ser Phe Ile Gly Cys
                                     90
Gly Phe Gln Ile Phe Leu Phe Leu Thr Phe Gly Gly Ala Glu Thr Leu
            100
                                 105
Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro
                            120
Leu His Tyr Ala Thr His Met Asn Lys Arg Val Cys Val Met Met Ile
                        135
                                             140
Thr Gly Ala Trp Ile Leu Gly Ser Ile Asn Ser Cys Ala His Thr Gly
                                        155
Tyr Ala Leu Gln Ile Pro Tyr Cys Arg Ser Arg Ala Ile Asn His Phe
                                     170
Phe Cys Asp Val Pro Ala Met Leu Thr Leu Ala Cys Thr Asp Thr Trp
                                 185
                                                     190
Val Tyr Glu Tyr Thr Val Phe Val Ser Thr Ile Leu Phe Leu Val Phe
                            200
                                                 205
Pro Phe Ile Gly Ile Val Cys Ser Tyr Gly Arg Val Phe Leu Ala Ile
                        215
                                             220
Tyr Arg Met His Ser Arg Ala Gly Lys Lys Lys Ala Tyr Ser Thr Cys
                    230
                                         235
Ser Thr His Leu Thr Val Val Thr Phe Tyr Tyr Ala Pro Phe Ala Tyr
                                     250
Thr Tyr Leu Arg Pro Arg Ser Leu Arg Ser Pro Glu Glu Asp Lys Ile
                                 265
                                                     270
Leu Ala Val Phe Tyr Thr Val Leu Thr Pro Met Leu Asn Pro Ile Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Arg Arg Met Thr
                        295
                                             300
His Arg Ile Cys Phe Ala Lys Ile
305
                    310
<210> 1491
<211> 318
<212> PRT
<213> Mus musculus
```

Leu Ile Tyr Ser Met Arg Asn Arg Glu Leu Lys Asp Ala Leu Arg Lys

```
Met Asn Trp Ile Leu His Ser Thr Met Val Ser Pro Asn Gln Thr Val
                                     10
Val Thr Glu Phe Val Leu Gln Gly Phe Ser Glu His Pro Ser Leu Arg
                                25
Leu Phe Leu Met Gly Cys Phe Leu Ser Leu Tyr Thr Val Ala Leu Met
Gly Asn Met Val Ile Ile Ala Leu Ile Thr Ser Ser Thr Gly Leu His
                        55
Ser Pro Met Tyr Phe Phe Leu Cys Asn Leu Ala Thr Met Asp Ile Ile
                    70
Cys Thr Ser Ser Val Leu Pro Lys Ala Leu Val Gly Leu Leu Ser Glu
                                     90
Glu Asn Thr Ile Ser Phe Lys Gly Cys Met Thr Gln Leu Phe Phe Leu
                                105
Val Trp Ser Gly Ser Ser Glu Leu Leu Leu Thr Val Met Ala Tyr
Asp Arg Tyr Val Ala Ile Cys Leu Pro Leu His Tyr Ser Ser Arg Met
                                             140
Ser Pro Gln Leu Cys Gly Thr Phe Ala Val Gly Val Trp Ser Ile Cys
                    150
                                        155
Ala Leu Asn Ala Ser Ile Asn Thr Gly Leu Met Thr Arg Leu Ser Phe
                                     170
Cys Gly Pro Lys Val Ile Thr His Phe Phe Cys Glu Ile Pro Pro Leu
                                                    190
Leu Leu Leu Ser Cys Ser Pro Thr Tyr Ile Asn Ser Val Met Thr Leu
Val Ala Asp Ala Phe Tyr Gly Gly Ile Asn Phe Leu Leu Thr Leu Leu
                        215
                                            220
Ser Tyr Gly Cys Ile Ile Ala Ser Ile Leu Arg Met Arg Ser Ala Glu
                    230
                                        235
Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val Val
                                     250
Ser Val Tyr Tyr Ser Ser Val Phe Cys Ala Tyr Ile Ser Pro Gly Ser
            260
Ser Tyr Ser Pro Glu Arg Ser Lys Phe Thr Ser Val Leu Tyr Ser Val
        275
                            280
Leu Ser Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp
Val Lys Leu Ala Leu Arg Arg Leu Phe Pro Ser Phe Ser Asn
                    310
<210> 1492
<211> 322
<212> PRT
<213> Mus musculus
<400> 1492
Met Pro Leu Glu Ala Glu Ser Ile Met Arg Asn Ser Thr Ala Val Thr
Asp Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Leu Trp Gln Ile Val
            20
Val Phe Thr Phe Leu Leu Val Thr Tyr Met Leu Ser Val Thr Gly Asn
                            40
Leu Ile Ile Ile Leu Thr Leu Ser Asp Ala His Leu Met Thr Pro
Met Tyr Phe Phe Leu Arg Asn Phe Ser Leu Leu Glu Ile Ser Phe Thr
                    70
```

<400> 1491

```
Ser Val Cys Ile Pro Arg Phe Leu Val Thr Ile Val Thr Gly Asp Arg
                                    90
Thr Ile Ser Tyr Asn Gly Cys Val Ala Gln Leu Phe Phe Phe Ile Phe
            100
                                105
Leu Gly Val Thr Glu Phe Tyr Leu Leu Ala Ala Met Ser Tyr Asp Arg
                            120
Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Thr Thr Ile Met Ser Asn
                        135
                                            140
Arg Val Cys Ile Leu Leu Val Phe Ser Ser Trp Phe Ala Gly Phe Met
                    150
                                        155
Ile Ile Phe Pro Pro Ile Ile Leu Leu Gln Leu Asp Phe Cys Ala
                165
                                    170
                                                        175
Ser Asn Ile Ile Asp His Phe Ile Cys Asp Ser Ser Pro Ile Leu Gln
            180
                                185
                                                    190
Leu Ser Cys Ser Asn Thr His Phe Leu Glu Leu Met Ala Phe Ser Leu
        195
                            200
                                                205
Ala Val Val Thr Leu Met Val Thr Leu Thr Leu Ile Ile Leu Ser Tyr
                        215
                                            220
Thr Asn Ile Ile Arg Thr Ile Leu Arg Ile Pro Ser Thr Asn Gln Arg
                                        235
                    230
Lys Lys Ala Phe Ser Thr Cys Ser Ser His Met Ile Val Val Ser Leu
                245
                                    250
Ser Tyr Gly Ser Cys Ile Phe Met Tyr Ile Lys Pro Ser Ala Arg Glu
            260
                                265
Arg Val Thr Leu Ser Lys Gly Val Ala Val Leu Asn Thr Ser Val Ala
                            280
Pro Leu Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Gln Gln Val Lys
                        295
                                            300
Gln Ala Phe Lys Asn Met Ile Gln Arg Ile Phe Phe Ser Ser Lys Asn
                    310
                                        315
Leu Pro
```

```
<210> 1493
```

<400> 1493

Met Ser Asn His Thr Glu Thr Thr Glu Phe Ile Leu Leu Gly Leu Ser 10 Asp Asp Pro Lys Leu Gln Val Val Ile Phe Val Phe Leu Phe Ile Thr 20 25 Tyr Thr Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 40 Leu Asp Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Val Leu Glu Val Ser Phe Thr Thr Val Thr Ile Pro Lys Phe Leu 70 75 Gly Thr Ile Ile Ser Gly Asp Lys Thr Ile Ser Phe Asn Asn Cys Ile 85 90 Ala Gln Leu Phe Phe Ile Leu Leu Gly Val Thr Glu Phe Tyr Leu 100 105 110 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 125 120 His Tyr Leu Thr Ile Met Ser Gln Lys Val Cys Thr Met Leu Val Phe 135 Ala Ser Trp Leu Thr Ser Phe Leu Ile Ile Phe Pro Ala Leu Met Leu

<211> 312

<212> PRT

<213> Mus musculus

```
145
                    150
                                        155
Leu Leu Gln Leu Asp Tyr Cys Gly Ser Asn Ile Ile Asp His Tyr Thr
                165
                                    170
                                                         175
Cys Asp Tyr Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Lys Phe
                                185
Leu Glu Arg Met Gly Phe Ser Cys Ala Val Phe Thr Leu Met Leu Thr
                            200
Leu Val Leu Ile Phe Leu Ser Tyr Thr Tyr Ile Ile Lys Thr Ile Val
                        215
Lys Ile Pro Ser Ala Ser Gln Arg Ser Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                                    250
Tyr Ile Lys Pro Ser Ala Thr Asp Arg Ala Ser Leu Thr Lys Gly Val
                                265
                                                     270
Ala Ile Leu Asn Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr
Ser Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Met Asn Met Thr Arg
                                            300
Lys Ile Val Phe Ser Thr Ser Lys
                    310
<210> 1494
<211> 310
<212> PRT
<213> Mus musculus
<400> 1494
Met Asp Glu Glu Asn Gln Thr Thr Thr Glu Phe Leu Leu Gly
Phe Ser Asp Leu Arg Ala Leu Gln Gly Pro Leu Phe Trp Leu Val Leu
                                25
Leu Val Tyr Leu Ile Thr Phe Leu Gly Asn Ser Leu Ile Ile Phe Leu
        35
                            40
Thr Gln Thr Ser Pro Val Leu His Ser Pro Met Tyr Phe Phe Leu Arg
                        55
His Leu Ser Met Val Glu Leu Leu Tyr Thr Thr Asp Ile Val Pro Arg
                                        75
Val Leu Ala Asp Leu Thr Ser Ser His Pro Gln Ala Ile Ser Phe Arq
                                    90
Ser Cys Ala Ala Gln Met Tyr Phe Phe Ile Val Leu Gly Ile Ser Glu
            100
                                105
                                                    110
Cys Cys Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
                            120
                                                125
Gln Pro Leu His Tyr Ser Thr Leu Met Asn His Arg Ala Cys Ile Ala
                        135
                                            140
Met Val Gly Thr Ser Trp Ile Met Gly Ile Ile Thr Ala Thr Thr His
                    150
                                        155
```

Ser Ser Leu Ile Phe Thr Leu Pro Phe Pro Ser Arg Pro Ile Ile Pro

His Phe Leu Cys Asp Ile Leu Pro Val Leu Arg Leu Ala Ser Ala Gly 185

Lys His Arg Ser Glu Ile Ser Val Met Thr Ala Thr Val Val Phe Ile 200 Met Ile Pro Phe Ser Leu Ile Val Thr Ser Tyr Ala Arg Ile Leu Gly

Ala Ile Leu Ala Ile Ala Ser Ser Gln Ser Arg Arg Lys Val Phe Ser

230

170

190

220

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Thr Cys Ser Ser His Leu Leu Val Val Ser Leu Phe Phe Gly Thr Ala
Ser Ile Thr Tyr Ile Arg Pro Arg Ala Gly Ser Ser Val Thr Thr Asp
Arg Ile Leu Ser Leu Phe Tyr Thr Val Val Thr Pro Met Leu Asn Pro
                            280
Ile Ile Tyr Thr Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Lys His
                        295
Met Lys Arg Gln Val Pro
<210> 1495
<211> 312
<212> PRT
<213> Mus musculus
<400> 1495
Met Arg Asn His Ser Ser Ile Thr Thr Phe Ile Leu Leu Gly Leu Thr
Asp Asp Pro Gln Leu Gln Val Leu Leu Phe Ile Phe Leu Phe Leu Thr
Tyr Met Leu Ser Val Thr Gly Asn Leu Ile Ile Ile Ile Leu Thr Leu
Val Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                        55
Ser Phe Leu Glu Val Ser Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                                        75
Tyr Ser Ile Ser Ser Gly Asp Asn Thr Ile Thr Tyr Asn Ala Cys Ala
                85
Ser Gln Ile Phe Phe Val Ile Leu Phe Gly Ala Thr Glu Phe Phe Leu
                                105
            100
                                                    110
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Met Thr Ile Met Asn Pro Arg Val Cys Ile Leu Leu Val Ile
                        135
                                            140
Thr Cys Trp Val Ser Gly Leu Met Ile Ile Thr Pro Pro Leu Ile Leu
                    150
                                        155
Gly Leu Gln Leu Asp Phe Cys Asp Ser Asn Ala Ile Asp His Phe Ser
                                    170
                165
                                                        175
Cys Asp Ala Gly Pro Leu Leu Lys Ile Ser Cys Ser Asp Thr Trp Val
            180
                                185
                                                    190
Ile Glu Gln Met Val Ile Leu Val Ala Val Phe Ala Leu Ile Ile Thr
                            200
        195
                                                205
Leu Ile Cys Val Ile Leu Ser Tyr Thr Tyr Ile Ile Arg Thr Ile Leu
                        215
                                            220
Arg Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile
                245
                                    250
Tyr Ile Lys Pro Ser Ala Lys Asp Glu Val Ala Ile Asn Lys Gly Val
            260
                                265
                                                    270
Ser Val Leu Thr Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Thr Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Ser Asp Ser Val Lys
                        295
Arg Ile Thr Phe Ile Ser Lys Ser
```

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1496
Met Arg Asn His Thr Leu Val Thr Thr Phe Ile Leu Leu Gly Leu Thr
                                     10
Glu Asp Pro Lys Trp Gln Ile Val Ile Phe Leu Phe Leu Phe Met Thr
            20
                                 25
Tyr Val Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Leu Leu Thr Leu
                             40
Leu Asp Ser Asn Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Lys Phe
                        55
Ser Phe Leu Glu Ile Ser Leu Thr Ser Thr Cys Ile Pro Arg Phe Leu
                    70
                                         75
Val Ser Ile Val Thr Met Asp Lys Thr Ile Ser Val Glu Ala Cys Phe
                                                         95
Thr Gln Leu Phe Ala Ala Phe Ile Phe Gly Ile Ala Gln Phe Phe Leu
            100
                                 105
Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                             120
His Tyr Thr Thr Ile Met Asn Asn Arg Val Cys Thr Leu Leu Phe Val
    130
                        135
                                             140
Ser Cys Cys Leu Ile Ala Val Phe Ala Ile Cys Pro Gly Val Ile Val
                    150
                                         155
Ser Leu Ser Leu Glu Phe Cys Asp Thr Ile Ile Glu His Phe Phe Cys
                                     170
Asp Tyr Ser Pro Ile Leu Lys Leu Ser Cys Asn Asp Thr Arg Phe Met
                                 185
                                                     190
Gln Leu Leu Asn Phe Ile Phe Ala Ile Phe Ile Leu Leu Met Thr Leu
        195
                             200
                                                 205
Ala Leu Val Met Phe Ser Tyr Gly Lys Ile Ile Ser Thr Ile Leu Arg
                        215
                                             220
Phe Pro Ser Ala Gln Gln Lys Lys Ala Phe Ser Thr Cys Ser Ser
                                         235
His Met Ile Val Val Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met Tyr
                                     250
Ile Lys Pro Ser Ala Glu Glu Arg Ile Tyr Leu Asn Lys Gly Ile Ala
                                                     270
                                 265
Ile Leu Thr Leu Ala Leu Ala Pro Val Leu Asn Pro Phe Ile Tyr Thr
                            280
Leu Arg Asn Lys Gln Val Lys Glu Ala Leu Lys Asp Ile Ile Lys Lys
                        295
                                             300
Cys Thr Ser Ala Thr Ser Lys
305
<210> 1497
<211> 312
<212> PRT
<213> Mus musculus
<400> 1497
Met Pro Asn Lys Thr Ser Ile Thr Glu Phe Ile Leu Leu Gly Leu Thr
                 5
                                    10
Asp Asp Pro Glu Leu Gln Ile Val Ile Phe Phe Leu Leu Ala Thr
            20
                                 25
```

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Tyr Leu Leu Ser Val Ser Gly Asn Met Thr Ile Ile Thr Leu Thr Leu
Ser Asn Val His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
Ser Phe Leu Glu Ile Leu Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                    70
Ile Ser Ile Ile Thr Gly Asn Thr Ala Ile Ser Tyr Asn Ala Cys Met
Ala Gln Val Phe Phe Leu Ile Phe Leu Gly Ala Thr Glu Phe Phe Leu
                                105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                                                125
                            120
His Tyr Thr Ala Ile Ile Asn Asn Lys Val Cys Asn Gln Leu Val Ile
Ala Ser Trp Ser Ala Gly Phe Leu Ile Val Phe Pro Pro Val Ile Met
                    150
Gly Leu Gln Leu Glu Phe Cys Asp Ser Asn Ile Ile Asp His Phe Thr
                                    170
Cys Asp Ser Ser Pro Met Leu Gln Ile Ala Cys Thr Asp Thr Lys Ile
Leu Glu Leu Met Ala Phe Phe Leu Ala Val Phe Thr Leu Ile Val Thr
        195
Leu Ala Leu Val Ile Leu Ser Tyr Thr Leu Ile Leu Arg Thr Ile Leu
                                             220
Lys Ile Pro Ser Ala Glu Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                                        235
Ser His Met Ile Val Val Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                                    250
Tyr Val Lys Thr Ser Ala Arg Glu Gly Val Val Leu Ser Lys Gly Val
            260
                                265
                                                     270
Ala Met Leu Asn Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Phe Thr Arg
                        295
Lys Leu Leu Ala Ser Lys Lys His
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1498

 Met
 Lys
 Asn
 Arg
 Thr
 Val
 Thr
 Thr
 Phe
 Ile
 Leu
 Leu
 Gly
 Leu
 Thr
 Asp

 Asp
 Ile
 Arg
 Leu
 Gln
 Thr
 Leu
 Leu
 Phe
 Ile
 Phe
 Leu
 Leu
 Phe
 Ser
 Tyr
 30

 Met
 Leu
 Ser
 Leu
 Asn
 Leu
 Thr
 Ile
 Ile
 Thr
 Leu
 Thr
 Leu
 Ile
 Ile
 Thr
 Leu
 Thr
 Leu
 Ile
 Ile
 Phe
 Leu
 Lys
 Asn
 Phe
 Ile
 Phe
 Leu
 Lys
 Asn
 Phe
 Ser
 Ile
 Phe
 Leu
 Lys
 Asn
 Phe
 Ile
 Phe
 Leu
 Lys
 Asn
 Phe
 Ile
 Phe
 Leu
 Lys
 Ile
 Tyr
 Ile
 Ile

```
120
Tyr Met Thr Ile Met Asn Ser Arg Val Cys Lys Asn Phe Ile Phe Phe
                        135
                                            140
Cys Trp Val Ala Ala Leu Ile Ile Val Leu Pro Pro Ile Ser Leu Gly
                    150
                                        155
Leu Gly Leu Glu Phe Cys Asp Ser Asp Ile Val Asp His Phe Cys Cys
                                    170
Asp Ala Ala Pro Leu Leu Lys Ile Ser Cys Ser Asp Thr Trp Leu Ile
            180
                                185
                                                     190
Glu Gln Met Val Ile Ala Gly Ala Val Leu Thr Phe Ile Ile Thr Phe
        195
                            200
Val Cys Val Val Leu Ser Tyr Gly Tyr Ile Ile Lys Thr Ile Leu Arg
                        215
                                             220
Phe Pro Ser Ala Lys Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                    230
                                        235
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
                                    250
Val Lys Pro Ser Ser Lys Asp Asn Val Ala Ile Asn Lys Gly Ile Ser
                                                     270
Leu Ile Ile Val Ser Ile Ser Pro Met Leu Asn Pro Phe Ile Tyr Ala
                            280
Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Tyr Ser Ile Lys Lys
                        295
Val Ala Phe Leu Ser Lys Met
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1499

Met Glu Ala Gln Asn His Thr Thr Val Lys Glu Phe Ile Leu Leu Gly 10 Leu Thr Glu Asn Ser Thr Leu Arg Val Ile Leu Phe Met Ile Phe Leu 25 Gly Ile Tyr Thr Val Thr Leu Val Gly Asn Phe Ser Ile Ile Ser Leu 40 Ile Arg Ser Cys Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser His Leu Ala Leu Val Asp Ile Gly Phe Ser Thr Ser Ile Thr Pro Ile 70 75 Met Leu Thr Gly Phe Leu Gly His Thr Val Thr Leu Ser Val Ala Ala Cys Val Ala Gln Phe Cys Ile Ala Val Thr Phe Gly Thr Val Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser 120 125 Pro Leu Leu Tyr Ser Thr His Met Ser Pro Arg Ile Cys Phe Leu Leu 140 Val Gly Ala Ser Tyr Val Gly Gly Cys Val Asn Ser Gly Thr Phe Thr 150 155 Ser Cys Leu Leu Ile Leu Ser Phe Cys Gly Pro Asn Gln Ile Asp His 170 Phe Phe Cys Asp Phe Pro Ala Val Leu Lys Leu Ser Cys Ser Asp Val 180 185 190 Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ala Gly Ser Ile Ile Val 205 200

```
Ile Thr Val Phe Val Ile Ala Val Ser Tyr Thr Tyr Ile Leu Ile Thr
                        215
Ile Leu Asn Met Arg Ser Thr Glu Gly Arg His Lys Ala Phe Ser Thr
                    230
Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr
                245
                                    250
Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Ala Gln Asn Lys
                                265
Ile Leu Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Glu Ala Leu Arg Lys Ala
   290
                        295
Ile Ile Arg Ile Phe Pro
```

<210> 1500 <211> 312 <212> PRT <213> Mus musculus

-100: 1500

<400> 1500 Met Glu Thr Glu Asn Asp Thr Met Val Thr Glu Phe Ile Ile Leu Gly Leu Thr Asp Ser Ala Thr Leu Arg Ala Ile Leu Phe Val Phe Phe Leu 20 Pro Val Tyr Ile Val Thr Val Val Gly Asn Ile Ser Ile Ile Leu Leu 35 Ile Arg Ser Ser Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser His Leu Ala Phe Val Asp Ile Gly Tyr Ser Thr Ser Val Thr Pro Ile 70 7.5 Met Leu Ile Ser Phe Leu Arg Glu Glu Thr Thr Ile Pro Leu Ala Gly 90 Cys Ala Ala Gln Leu Gly Ser Asp Val Ala Phe Gly Thr Thr Glu Cys 105 Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser 120 Pro Leu Leu Tyr Ser Thr Gln Met Ser Pro Ala Ile Cys Cys Phe Leu 140 Leu Gly Ala Ser Tyr Leu Gly Gly Cys Met Asn Ala Ser Ser Phe Thr 150 155 Gly Cys Phe Val Asn Leu Asn Phe Cys Gly Pro Asn Lys Val Asn His 170 Phe Phe Cys Asp Leu Phe Pro Leu Val Lys Leu Ser Cys Gly His Ala 185 190 Tyr Ile Ala Glu Ile Ser Pro Ser Ile Ser Ser Ala Ser Val Leu Val 200 Ser Thr Leu Ser Thr Ile Ile Val Ser Tyr Ile Tyr Ile Leu His Ser 215 220 Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Asn Lys Ala Phe Ser Thr 230 235 Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr Val Leu Phe Val Tyr Val Met Pro Lys Ser Ser Tyr Ser Ala Asp Gln Val Lys 265 Val Ala Ser Val Val Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Met Lys Lys Leu

```
300
   290
                        295
Met Ala Arg Thr His Trp Phe Pro
                    310
<210> 1501
<211> 310
<212> PRT
<213> Mus musculus
<400> 1501
Met Glu Thr Gln Asn His Thr Thr Val Thr Glu Phe Ile Leu Leu Gly
Leu Thr Glu Ser Ser Thr Leu Arg Val Ile Leu Phe Met Val Phe Leu
Gly Ile Tyr Thr Val Thr Leu Val Gly Asn Phe Ser Ile Ile Ser Leu
                            40
Ile Arg Ser Cys Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser
His Leu Ala Phe Val Asp Ile Gly Phe Ser Thr Ser Ile Thr Pro Thr
                    70
Met Phe Lys Gly Phe Leu Gly Asn Arg Leu Val Leu Ser Val Ala Ala
                85
                                    90
Cys Ile Ala Gln Phe Cys Ile Thr Val Thr Phe Gly Thr Val Glu Cys
           100
                                105
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                            120
                                                125
Pro Leu Leu Tyr Ser Thr His Met Ser Pro Arg Ile Cys Phe Leu Leu
                        135
                                            140
Val Gly Ala Ser Tyr Val Gly Gly Cys Val Asn Ser Gly Ala Phe Thr
                   150
                                        155
Ser Cys Leu Ser Ile Leu Ser Phe Cys Gly Pro Asn Gln Ile Asp His
               165
                                  170
Phe Phe Cys Asp Phe Pro Ala Val Leu Lys Leu Ser Cys Ser Asp Val
           180
                                185
                                                    190
Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ala Gly Ser Ile Ile Val
       195
                            200
Ile Thr Val Phe Val Ile Ala Val Ser Tyr Ala Tyr Ile Leu Ile Thr
                        215
                                            220
Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala Phe Ser Thr
                    230
Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr
                245
                                    250
Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Ala Gln Asn Lys
            260
                                265
Ile Leu Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
       275
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Glu Ala Leu Arg Lys Ala
                        295
Ile Ile Arg Ile Phe Pro
<210> 1502
<211> 314
<212> PRT
<213> Mus musculus
<400> 1502
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```
Met Ala Glu Gly Asn Gln Thr Val Ile Phe Gln Phe Leu Leu Gly
Leu Pro Ile Pro Thr Glu His Gln Gln Leu Tyr Tyr Ala Leu Phe Leu
Leu Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                   70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Asp Ser Ser Ile Thr Tyr Ala Gly
                                    90
Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
                                105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
                                               125
Pro Leu His Tyr Met Ser Ile Met Ser Pro Ser Leu Cys Val Ser Leu
                       135
                                           140
Val Leu Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                       155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                   170
                                                       175
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr
           180
                               185
                                                   190
His Val Asn Glu Leu Val Ile Phe Val Thr Gly Gly Leu Ile Leu Val
       195
                           200
Ile Pro Phe Val Leu Ile Leu Val Ser Tyr Ala Arg Ile Val Ser Ser
                       215
                                           220
Ile Leu Lys Val Pro Ser Ala Arg Gly Ile Arg Lys Ala Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                                   250
               245
Gly Leu Tyr Leu Cys Pro Ser Ala Asp Asn Ser Thr Val Lys Glu Thr
           260
                               265
                                                   270
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Ala Arg Val
                       295
Ile Cys Lys Lys Val Phe Phe Cys Leu
```

```
<210> 1503
<211> 317
```

<400> 1503

 Met
 Gln
 Gly
 Thr
 Thr
 Glu
 Arg
 Asn
 Gln
 Thr
 Ala
 Ile
 Ser
 Gln
 Phe
 Leu
 Leu
 Ile
 Ile</th

<212> PRT

<213> Mus musculus

```
90
Tyr Ala Gly Cys Leu Ala Gln Met Tyr Phe Phe Leu Phe Phe Ala Asp
            100
                                105
Leu Glu Ser Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala
        115
                            120
                                                125
Ile Cys Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Arg Leu Cys
   130
                       135
                                            140
Val Ser Leu Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met
                   150
                                        155
Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val
                                    170
Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys
                                185
           180
                                                    190
Ser Asp Thr Tyr Val Asn Glu Leu Val Ile Phe Val Met Gly Ser Leu
       195
                            200
Ile Leu Val Ile Pro Phe Val Leu Ile Leu Val Ser Tyr Ala Arg Ile
                        215
                                            220
Val Ser Ser Ile Leu Lys Val Pro Ser Ala Arg Gly Ile Arg Lys Ala
                   230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
               245
                                    250
Thr Val Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asp Asn Ser Thr Val
            260
                                265
Lys Glu Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu
                            280
                                               285
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu
                        295
Ile Ser Val Leu Cys Lys Lys Ile Leu Phe Cys Leu
                    310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1504

Met Thr Glu Arg Asn Lys Thr Val Ile Ser Gln Phe Leu Leu Gly Leu Pro Ile Pro Pro Glu His Gln Gln Leu Phe Tyr Ala Leu Phe Leu Val Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu Ile Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly Cys Leu Ala Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Tyr Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Leu Cys Val Ser Leu Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His

```
Tyr Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr
Arq Val Asn Glu Val Val Ile Phe Ile Val Ala Ser Ile Phe Leu Val
        195
                            200
Leu Pro Phe Ala Leu Ile Thr Met Ser Tyr Val Arg Ile Val Ser Ser
Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
                                    250
Gly Leu Tyr Leu Ser Pro Ser Ser Asn Asn Ser Thr Val Lys Asp Thr
                                265
Val Met Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Leu Glu Arg Val
                        295
Phe Cys Lys Arg Lys Ile Gln Leu Asn Leu
                    310
```

<210> 1505 <211> 313 <212> PRT

<213> Mus musculus

<400> 1505

Met Pro Gly Glu Asn Val Thr Val Trp Ser Leu Phe Phe Leu Glu Gly 10 Phe Ser Arg Tyr Pro Arg Leu Glu Ile Val Leu Phe Val Phe Ser Leu 20 25 Val Met Tyr Leu Val Thr Ile Leu Gly Asn Cys Thr Leu Ile Leu Ile 40 Thr Val Leu Asp Ser Arg Leu Gln Thr Pro Met Tyr Leu Phe Leu Gly 55 Asn Leu Ser Phe Met Asp Ile Cys Tyr Thr Ser Ala Ser Ile Pro Thr 70 75 Leu Leu Val Asn Leu Leu Ser Ser Lys Lys Thr Ile Ile Phe Ser Gly 90 Cys Ala Val Gln Met Tyr Leu Ser Leu Ser Met Gly Ser Thr Glu Cys 105 110 Ile Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Arg Tyr Pro Ile Ile Met Asn Arg Gln Val Cys Val Gln Met 130 135 140 Ala Thr Ile Ser Trp Val Thr Gly Cys Leu Thr Ala Leu Leu Glu Thr 150 155 Ser Phe Ala Leu Gln Ile Pro Leu Cys Gly Asn Ile Ile Asn His Phe 170 Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Val Ser Ser Leu 185 190 Leu Met Asp Leu Val Met Leu Val Val Ser Ile Leu Leu Pro Ile 195 200 205 Pro Met Leu Leu Ile Cys Ile Ser Tyr Gly Phe Ile Leu Ser Thr Ile 215 220 Leu Arg Ile Ser Ser Thr Glu Gly Arg Asn Lys Ala Phe Ser Thr Cys 230 235 Gly Ala His Leu Thr Val Val Ile Leu Tyr Tyr Gly Ala Ala Leu Ser 250 Met Tyr Leu Lys Pro Ser Ser Ser Asn Ser Gln Glu Ile Asp Lys Ile

```
260
                                265
Ile Ser Leu Leu Tyr Gly Val Leu Thr Pro Met Leu Asn Pro Ile Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Val Ile Lys Leu Leu
                        295
Gly Lys Val Pro Leu Ala Pro Ser Val
                    310
<210> 1506
<211> 312
<212> PRT
<213> Mus musculus
<400> 1506
Met Pro Asn Ser Ile Gln Leu Arg Glu Lys Arg Met Asn Val Thr Glu
                                    10
Phe Ile Leu Met Gly Leu Thr Gln Asn Pro Gln Leu Gln Arg Ile Leu
                                25
Phe Phe Val Leu Leu Ile Thr Tyr Ile Ile Thr Val Thr Gly Asn Leu
                            40
Leu Ile Val Gly Thr Ile Val Cys Ser Gln Ser Leu Asn Ser Pro Met
                        55
Tyr Phe Phe Leu Thr Phe Leu Ser Leu Ile Asp Ala Cys Tyr Ser Ser
65
                    70
                                        75
Cys Thr Ile Pro Lys Met Leu Val Asp Leu Leu Ser Glu Thr Lys Thr
               85
                                    90
Ile Ser Phe Asn Gly Cys Ile Leu Gln Leu Phe Val Glu His Phe Leu
                                105
           100
                                                    110
Gly Ala Ser Glu Ile Val Leu Leu Val Val Met Ala Tyr Asp Arg Tyr
                                                125
        115
                            120
Val Ala Ile Cys Arg Pro Leu His Tyr Ala Ser Arg Met Asn His His
                        135
                                            140
Met Cys Cys Leu Leu Val Gly Ile Cys Trp Ile Val Gly Phe Leu His
                   150
                                        155
Ser Phe Gly Gln Ile Leu Val Thr Leu Trp Ile Pro Phe Cys Gly Pro
                                    170
                                                        175
                165
Asn Ile Leu Asp His Phe Phe Cys Asp Ile Phe Pro Leu Leu Gln Leu
                                185
                                                    190
           180
Ala Cys Thr Asp Thr Phe Leu Leu Gly Leu Leu Val Ala Cys Asn Gly
        195
                            200
Gly Val Ile Pro Val Ile Thr Phe Thr Met Leu Leu Met Ser Tyr Ala
                        215
                                            220
Val Ile Leu Tyr Ser Leu Arg Thr His Ser Thr Ala Gly Arg Lys
                    230
                                        235
                                                             240
Ala Leu Ser Thr Cys Gly Ser His Ile Thr Val Val Val Leu Phe Phe
                                    250
                245
Val Pro Cys Ile Phe Met Tyr Met Arg Pro Val Ala Thr Phe Pro Met
                                265
                                                    270
Asp Lys Ala Ile Ala Val Phe Tyr Ile Ile Ile Thr Pro Leu Leu Asn
                            280
                                                285
Pro Val Ile Tyr Thr Val Arg Asn Ala Glu Val Lys Ser Ala Ile Arg
                        295
Met Leu Leu Lys Arg Met His Leu
                    310
```

<212> PRT

<213> Mus musculus

```
Ala Leu Ser Asp Leu Cys Tyr Thr Ser Thr Val Thr Pro Lys Phe Leu
                    70
Thr Asp Leu Leu Val Glu Arg Asn Lys Ile Ser Tyr Thr Ser Cys Met
                85
                                    90
Ala Gln Leu Phe Thr Met His Phe Phe Gly Gly Ile Glu Ile Leu Ile
           100
                                105
Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Ser Ile Ile Met Ser Arg Gly Arg Cys His Ala Met Val Thr
                        135
                                            140
Ala Cys Cys Ala Gly Ala Phe Ile His Ser Phe Leu Gln Ser Leu Leu
                    150
                                        155
Ala Ile Ser Leu Pro Phe Cys Gly His Asn Glu Met Asp His Tyr Phe
                                    170
                165
                                                        175
Cys Asp Ile Tyr Pro Leu Val Thr Leu Ser Cys Thr Asn Thr His Arg
           180
                                185
Val Gly Leu Leu Val Val Asn Ser Gly Met Met Gly Leu Val Thr
       195
                            200
                                                205
Phe Val Val Leu Met Trp Ser Tyr Ser Phe Ile Leu Tyr Thr Ile Arg
                        215
                                            220
Ala Tyr Pro Ala Glu Ser Arg Ser Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Val Thr Val Val Ile Phe Phe Phe Val Pro Val Leu Phe Ile Tyr
                245
                                    250
Ile Arg Pro Ala Thr Thr Tyr Pro Glu Asp Lys Val Phe Ala Leu Phe
           260
                                265
Tyr Thr Ile Leu Ala Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Thr Glu Met Lys Asn Ala Leu Arg Lys Val Trp Cys His Lys Leu
Phe Phe Ile
305
<210> 1509
<211> 313
<212> PRT
<213> Mus musculus
<400> 1509
Met Glu Arg Ser Leu Gln Leu Ala Asn Arg Ser Asp Asp Gln Asp Phe
                                    10
Ile Leu Leu Gly Leu Ser Ala Ser Lys Asp Ile Lys Asp Gly Leu Phe
                                25
Val Ile Phe Leu Thr Leu Tyr Leu Leu Ile Phe Leu Glu Asn Met Leu
                            40
Val Ile Tyr Leu Ile Ser Ser His His Glu Leu Leu His Lys Pro Met
```

55

70

Tyr Phe Phe Leu Gly Asn Leu Ser Cys Leu Glu Met Cys Tyr Val Ser

Val Thr Met Pro Thr Leu Leu Val Gly Leu Arg Ser Ser Pro Tyr His

Val Ser Phe Ser Phe Cys Met Ala Gln Leu Phe Leu Phe Met Ser Leu 105 Ile Gly Thr Lys Cys Thr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr 120

Val Ala Ile Cys Cys Pro Leu His Tyr Ser Val Ile Met Arg Pro Gln

75

125

```
Val Cys Trp Gly Leu Ala Leu Ser Ser Trp Val Gly Gly Leu Leu Val
                                        155
Ser Ala Ile Lys Thr Thr Cys Ile Ala Ser Leu Ser Tyr Cys Gly Pro
                                    170
Asn Val Leu Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu
                                185
Ser Cys Thr His Val Ala Leu Thr Glu Leu Ile Asp Phe Ile Ser Ala
                            200
Ile Ile Ile Phe Cys Gly Ser Leu Leu Val Ala Leu Ala Ser Tyr Val
                        215
Ala Ile Gly Arg Val Leu Ile Lys Met Pro Ser Ala Ala Ala Ser His
                                        235
Lys Ala Leu Ser Thr Cys Ala Ser His Leu Leu Val Met Gly Leu Phe
                                    250
Tyr Ser Val Val Leu Phe Met Tyr Ser Arg Pro Ser His Val Lys Ser
                                265
Thr Asp Leu Asn Lys Val Leu Ser Val Ile Tyr Thr Val Ala Thr Pro
       275
                            280
Met Cys Ser Pro Ile Ile Tyr Cys Leu Arg Asn Arg Glu Val His Ala
                        295
Val Leu Arg Arg Thr Pro Cys Leu Cys
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1510

Met Glu Lys Ser Leu Glu Leu Gly Asn Val Thr Arg Val Gln Glu Phe 10 Val Leu Leu Gly Leu Ser Thr Arg Leu Gly Ile Arg Asp Ala Leu Phe 20 25 Val Ile Phe Leu Thr Leu Tyr Leu Leu Thr Leu Leu Glu Asn Thr Leu 40 Ile Ile Tyr Leu Ile Cys Ser His Ser Glu Leu His Lys Pro Met Tyr 55 Phe Phe Leu Gly Asn Leu Ser Cys Leu Glu Met Cys Tyr Val Ser Val 75 Thr Met Pro Thr Leu Leu Met Gly Leu Trp Thr Gly Pro Cys His Val 90 85 Pro Phe Thr Gly Cys Met Thr Gln Leu Phe Phe Phe Ile Ser Leu Ile 100 105 110 Cys Thr Glu Cys Thr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val 115 120 125 Ala Ile Cys Arg Pro Leu His Tyr Pro Leu Leu Met Arg Pro Gln Val 135 140 Cys Leu Gly Leu Ala Leu Ser Ser Trp Leu Gly Gly Leu Leu Val Ser 150 155 Val Ile Lys Thr Ala Cys Ile Ala Ser Leu Ser Tyr Cys Gly Pro Asn 165 170 Val Leu Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu Ser 185 190 Cys Thr His Val Ala Leu Thr Glu Leu Val Asp Phe Ile Ser Ala Ile 200 Val Ile Leu Trp Gly Ser Leu Leu Val Ala Met Ala Ser Tyr Val Ala 215 Ile Gly Arg Thr Val Leu Gly Met Pro Ser Ala Ala Ala Arg His Lys

```
230
                                        235
Ala Phe Ser Thr Cys Ala Ser His Leu Val Val Val Gly Ile Phe Tyr
                                    250
                245
Ser Ala Thr Ile Phe Ile Tyr Ala Arg Pro Ser Arg Ile Glu Ala Met
                                265
Asp Leu Asn Lys Val Leu Ser Val Ile Tyr Thr Val Val Thr Pro Met
                            280
Cys Asn Pro Val Ile Tyr Cys Leu Arg Asn Arg Glu Val Gln Ser Ala
                        295
Phe His Arg Thr Met Arg Trp Ser Ser Val
                    310
<210> 1511
<211> 312
<212> PRT
<213> Mus musculus
<400> 1511
Met Glu Arg Ser Leu Ala Leu Ala Asn Met Thr Arg Val Gln Gln Phe
                                    10
Ile Leu Leu Gly Leu Ser Thr Arg Leu Asp Ile Arg Asp Ala Leu Phe
            20
                                25
Ala Val Phe Leu Thr Leu Tyr Leu Leu Thr Leu Leu Glu Asn Thr Leu
                            40
Ile Ile Tyr Leu Ile Cys Ser His Lys Glu Leu His Lys Pro Met Tyr
                        55
Phe Phe Leu Gly Asn Leu Ser Cys Leu Glu Met Cys Tyr Val Ser Val
                   70
                                        75
Thr Met Pro Thr Leu Leu Met Gly Leu Trp Asn Gly Leu Tyr His Ile
                                    90
               8.5
Pro Phe Ile Ala Cys Met Thr Gln Leu Phe Phe Ile Val Leu Val
            100
                                105
Gly Thr Glu Cys Ile Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val
       115
                            120
                                               125
Ala Ile Cys Arg Pro Leu His Tyr Pro Val Leu Met Arg Pro Gln Val
                        135
Cys Leu Gly Leu Ala Met Ile Ser Trp Leu Gly Gly Leu Leu Val Ser
                   150
                                       155
Met Ile Lys Thr Thr Cys Ile Ala Thr Leu Ser Tyr Cys Gly Pro Asn
               165
                                    170
                                                        175
Val Leu Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu Ser
                                185
            180
Cys Thr His Val Ala Leu Thr Glu Leu Val Asp Phe Ile Ser Ala Ile
                            200
       195
Val Ile Leu Trp Gly Cys Phe Leu Thr Thr Met Ala Ser Tyr Val Ala
                        215
                                            220
Ile Gly Arg Ala Val Leu Arg Met Pro Ser Thr Thr Ala Arg Tyr Lys
                                        235
                    230
Ala Phe Ser Thr Cys Ala Ser His Leu Val Val Gly Ile Phe Tyr
                245
                                    250
Ser Val Thr Ile Phe Ile Tyr Ala Arg Pro Lys Arg Ile Glu Ala Met
                                265
Asp Leu Asn Lys Val Leu Ser Val Ile Tyr Thr Val Val Thr Pro Met
                            280
Cys Asn Pro Val Ile Tyr Cys Leu Arg Asn Lys Glu Val Gln Val Ala
                        295
Leu His Arg Thr Met His Trp Ser
```

```
<210> 1512
<211> 312
<212> PRT
<213> Mus musculus
<400> 1512
Met Ala Arg Ser Leu Glu Leu Ala Asn Met Thr Arg Val Gln Lys Phe
Leu Leu Gly Leu Ser Thr Arg Leu Asp Ile Arg Asp Ala Leu Phe
Ala Val Phe Leu Thr Leu Tyr Leu Leu Thr Leu Val Glu Asn Thr Leu
                            40
Ile Ile Tyr Leu Ile Phe Ser His Lys Glu Leu His Lys Pro Met Tyr
Phe Phe Leu Gly Asn Leu Ser Cys Leu Glu Met Cys Tyr Val Ser Val
                    70
Thr Met Pro Thr Leu Leu Val Gly Leu Trp Thr Gly Pro Tyr His Ile
                                    90
Pro Phe Thr Leu Cys Met Thr Gln Leu Phe Phe Phe Ile Val Leu Ile
                                105
Cys Thr Glu Cys Thr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val
                            120
                                                125
Ala Ile Cys Arg Pro Leu His Tyr Pro Leu Leu Met Arg Pro Gln Val
                        135
                                            140
Cys Leu Gly Leu Ala Leu Ser Ser Trp Leu Gly Gly Leu Ile Val Ser
                    150
                                        155
Val Ala Lys Thr Thr Cys Ile Ala Ser Leu Ser Tyr Cys Gly Pro Asn
                165
                                    170
                                                        175
Val Leu Asn Gln Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu Ser
            180
                                185
Cys Thr His Val Ala Leu Thr Glu Leu Val Asp Phe Ile Ser Ala Ile
        195
                            200
Val Ile Phe Cys Gly Thr Leu Leu Val Ser Leu Ala Ser Tyr Ser Ala
                        215
                                            220
Ile Gly Met Ala Val Leu Arg Met Pro Ser Ala Ala Ala Arg Arg Lys
                    230
                                        235
Ala Phe Ser Thr Cys Ala Ser His Leu Val Val Gly Ile Phe Tyr
                245
                                    250
Ser Ala Ala Leu Phe Ile Tyr Cys Arg Pro Ser Arg Ile Lys Ser Met
                                265
                                                     270
            260
Asp Leu Asn Lys Val Leu Ser Val Ile Tyr Thr Val Val Thr Pro Leu
                            280
Cys Asn Pro Ile Ile Tyr Cys Leu Arg Asn Lys Glu Val His Thr Val
                        295
Leu Lys Lys Thr Leu His Trp Pro
<210> 1513
<211> 309
<212> PRT
<213> Mus musculus
<400> 1513
Met Met Arg Asn Gln Thr Leu Val Thr Glu Phe Ile Leu Gln Gly Phe
```

Ser Glu His Pro Gln Tyr Gln Leu Pro Leu Phe Phe Cys Phe Leu Ser

```
Leu Tyr Cys Val Ala Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile
                            40
Thr Cys Asn Pro Gly Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
                        55
Leu Ala Thr Met Asp Ile Ile Cys Thr Ser Ser Ile Met Pro Lys Ala
                                         75
Leu Arg Gly Leu Val Ser Lys Arg Asn Pro Ile Ser Tyr Gly Gly Cys
                                     90
Met Ala Gln Leu Tyr Phe Leu Thr Trp Ser Ala Ser Ser Glu Leu Leu
            100
                                105
                                                     110
Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His Pro
                            120
                                                 125
Leu His Tyr Ser Thr Met Met Ser Lys Ala Phe Cys Ser Met Leu Ala
                        135
                                             140
Ala Gly Val Trp Ala Leu Cys Ala Phe Asn Thr Ala Ile His Thr Gly
                    150
                                        155
Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Asn Val Ile Thr His Phe
                165
                                    170
Phe Cys Glu Val Pro Pro Leu Leu Leu Ser Cys Ser Ser Thr Tyr
            180
                                185
                                                     190
Val Asn Ser Val Met Ile Val Leu Ala Asp Ala Phe Tyr Gly Ile Leu
        195
                            200
                                                 205
Asn Phe Leu Met Thr Ile Val Ser Tyr Gly Phe Ile Ile Ser Ser Ile
                        215
                                             220
Leu Lys Met Arg Thr Ser Glu Gly Lys Gln Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Ile Val Val Cys Met Tyr Tyr Thr Ala Val Phe Tyr
                245
                                    250
Ala Tyr Ile Ser Pro Val Ser Ser Tyr Asn Ala Glu Lys Ser Lys Leu
            260
                                265
Ala Gly Val Leu Tyr Thr Met Leu Ser Pro Thr Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Glu Val Lys Ala Ala Leu Arg Lys Phe Phe
Pro Phe Leu Arg Asn
305
<210> 1514
<211> 307
<212> PRT
<213> Mus musculus
<400> 1514
Met Asp Gly Asp Asn Glu Thr Met Val Ala Glu Phe Leu Leu Gly
                                    10
Leu Ser Gly Lys Ser Glu Gln Glu Glu Val Val Phe Gly Met Phe Leu
                                25
Gly Met Tyr Leu Val Thr Ile Ser Gly Asn Leu Leu Ile Ile Leu Ala
Ile Ser Cys Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
Asn Leu Ser Ser Val Asp Ile Cys Phe Ser Ser Val Thr Val Pro Lys
                    70
                                        75
```

Ala Leu Val Asn His Val Leu Gly Ser Lys Ser Ile Ser Tyr Thr Glu

Cys Met Ile Gln Ile Tyr Phe Phe Ile Thr Phe Ile Asn Met Asp Gly
100 105 110

```
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu His Tyr Thr Met Met Met Arg Ser Arg Leu Cys Val Leu Leu
                        135
Val Ala Ile Ser Trp Val Ile Thr Asn Leu His Ala Leu Leu His Thr
                    150
                                       155
Leu Leu Met Val Arg Leu Thr Phe Cys Ser His Asn Ala Val His His
               165
                                    170
Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys Ser Asp Thr
           180
                                185
Phe Ile Asn Asp Leu Met Val Phe Thr Val Gly Gly Val Ile Phe Leu
       195
                            200
Thr Pro Phe Ser Cys Ile Val Val Ser Tyr Val Tyr Ile Phe Ser Lys
                        215
                                           220
Val Leu Lys Ile Pro Ser Ala Arg Gly Ile Arg Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ala Ile Leu
                                    250
                245
Gly Val Tyr Met Arg Pro Ser Ser Ser Tyr Ser Leu Gln Asp Thr Val
                                265
            260
Ala Thr Val Ile Phe Thr Val Val Thr Pro Leu Val Asn Pro Phe Ile
                            280
                                     . 285
Tyr Ser Leu Arg Asn Gln Asp Met Lys Gly Ala Leu Arg Lys Ile Met
Leu Arg Ser
305
```

<210> 1515 <211> 315

<212> PRT

<213> Mus musculus

<400> 1515

Met Val Arg Glu Asn Gln Ser Thr Ala Ile Glu Phe Leu Leu Gly Ile Ala Gly Gln Ser Lys Glu Glu Glu Val Ile Phe Gly Met Phe Leu Trp Met Tyr Leu Val Thr Val Cys Gly Asn Leu Leu Ile Ile Leu Ala 40 Ile Ser Cys Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala 55 Asn Leu Ser Ser Val Asp Ile Cys Phe Ser Ser Val Thr Val Pro Lys 75 Ala Leu Val Asn Tyr Met Leu Gly Ile Lys Thr Ile Ser Tyr Thr Glu 90 Cys Met Thr Gln Ile Tyr Phe Phe Ile Thr Phe Ile Asn Met Asp Gly 105 Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu His Tyr Thr Met Met Met Arg Pro Arg Leu Cys Val Leu Leu 135 Val Ala Ile Ser Trp Ala Ile Thr Asn Leu His Ala Leu Leu His Thr 155 Leu Leu Met Val Arg Leu Thr Phe Cys Ser His Asn Ala Met His His 170 Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys Ser Asp Thr 185 Phe Ile Asn Asp Ile Thr Ala Phe Thr Val Gly Gly Leu Thr Ser Ile

```
195
                            200
Thr Pro Phe Thr Cys Ile Thr Val Ser Tyr Gly Tyr Ile Leu Ser Asn
                        215
Val Leu Lys Phe Pro Ser Ile Gln Gly Ile Arg Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ala Ile Leu
                245
                                    250
Gly Val Tyr Met His Pro Ser Ser Thr Tyr Ser Val Gln Asp Met Val
           260
                                265
                                                    270
Ala Thr Ala Phe Phe Thr Val Val Thr Pro Met Val Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Arg Asp Val Lys Gly Ala Leu Arg Lys Leu Met
                        295
Cys Arg Arg Leu Thr Ser Ser Arg Phe Tyr Asn
                    310
<210> 1516
<211> 307
<212> PRT
<213> Mus musculus
<400> 1516
Met Asp Gly Asp Asn Gln Thr Ile Val Thr Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr Arg Gln Ser Glu Lys Glu Glu Val Val Phe Gly Leu Phe Leu
                                25
Trp Met Tyr Leu Val Thr Ile Ser Gly Asn Leu Leu Ile Ile Leu Ala
                            40
Ile Ser Cys Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                                            60
                        55
Asn Leu Ser Ser Val Asp Ile Ser Ala Pro Ser Val Ile Val Pro Lys
                   70
                                        75
Ala Leu Val Asn His Met Leu Gly Ser Lys Ser Ile Ser Tyr Thr Gly
               8.5
                                    90
Cys Met Thr Gln Ile Tyr Phe Phe Ile Thr Phe Ser Asn Met Asp Gly
                                105
           100
                                                    110
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
                                                125
Pro Leu His Tyr Thr Met Met Arg Pro Arg Leu Cys Val Leu Leu
                        135
                                            140
Val Ala Ile Ser Trp Ala Ile Thr Asn Leu His Ala Leu Leu His Thr
                   150
                                        155
Leu Leu Met Val Arg Leu Thr Phe Cys Ser His Asn Ala Val His His
```

170

250

Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys Ser Asp Thr

Phe Ile Asn Asp Leu Met Val Phe Thr Ile Gly Gly Leu Val Phe Met

Val Leu Lys Leu Lys Ser Ala His Gly Ile Arg Lys Ala Leu Ser Thr

Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ala Ile Leu

Gly Ile Tyr Met His Pro Ser Ser Thr Tyr Thr Val Gln Asp Thr Val 265 Ala Thr Val Ile Phe Thr Val Val Thr Pro Met Val Asn Pro Phe Ile 280

200 Thr Pro Phe Thr Cys Ile Ile Val Ser Tyr Ala Tyr Ile Phe Ser Lys

215

230

185

175

190

220

235

165

180

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Leu Arg Ser
305
<210> 1517
<211> 305
<212> PRT
<213> Mus musculus
<400> 1517
Met Glu Glu Ala Asn Gln Thr Val Val Ser Glu Phe Ile Phe Gln Gly
Leu Cys Ala Ser Lys Glu Leu Gln Ile Leu Leu Leu Pro Phe Ser
Thr Leu Tyr Met Met Thr Val Val Gly Asn Leu Phe Val Val Ile Leu
                           40
Ile Ile Ile Asp His His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
                        55
Asn Leu Ser Phe Ile Asp Phe Cys Leu Ser Ser Val Thr Thr Pro Lys
                    70
Leu Ile Thr Asp Leu Leu Lys Asp Asn Lys Thr Ile Ser Phe Gly Gly
                                    90
Cys Met Ser Gln Ile Leu Cys Val His Phe Phe Gly Gly Glu Met
           100
                               105
                                                   110
Val Leu Leu Val Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                           120
                                               125
Pro Leu His Tyr Ser Ser Ile Met Asp Arg Gln Lys Cys Ile Trp Leu
                       135
                                           140
Val Val Ile Ser Trp Thr Ile Gly Phe Ile His Ala Met Ser Gln Leu
                   150
                                       155
Ile Leu Ile Leu Asp Leu Pro Phe Cys Gly Pro Arg Val Ile Asp Ser
               165
                                   170
                                                       175
Phe Phe Cys Asp Ile Pro Leu Val Met Lys Leu Ala Cys Met Asn Thr
           180
                               185
                                                   190
Asp Thr Leu Gly Ile Val Ile Asn Ala Asp Ser Gly Val Leu Ala Thr
        195
                            200
                                               205
Thr Cys Phe Ile Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Leu Thr
                       215
                                           220
Val Gln Leu His Ser Lys Asp Gly Ser Ser Lys Ala Leu Ser Thr Cys
                    230
                                       235
Thr Ser His Ile Ile Val Val Leu Phe Phe Gly Pro Cys Ile Phe
                245
                                    250
Ile Tyr Leu Trp Pro Val Ser Ile Thr Trp Val Asp Lys Phe Leu Ala
            260
                                265
Val Phe Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr
                           280
Leu Arg Asn Lys Asp Ile Lys Asn Ala Ile Lys Lys Leu Lys Asn His
            . 295
Met
305
<210> 1518
<211> 305
<212> PRT
<213> Mus musculus
```

Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Leu Arg Lys Ile Ile

```
Met Glu Asp Ser Asn Arg Thr Val Ser Ser Glu Phe Ile Phe Gln Gly
                                     10
Leu Cys Ser Ser Arg Gln Leu Glu Ile Phe Leu Leu Pro Phe Ser
Ile Leu Tyr Leu Met Ala Val Val Gly Asn Leu Phe Val Val Ile Leu
                            40
Ile Ile Ile Asp His His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
                                             60
Asn Leu Ser Phe Ile Asp Phe Cys Leu Ser Ser Val Thr Thr Pro Lys
                    70
                                                             80
Leu Thr Ile Asp Leu Leu Lys Glu Asn Lys Thr Ile Ser Phe Val Gly
                                     90
Tyr Met Arg Gln Ile Val Cys Val His Phe Phe Ala Gly Gly Glu Met
            100
                                 105
                                                     110
Val Leu Leu Val Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
Pro Leu His Tyr Ser Ser Ile Met Asp Arg Gln Lys Cys Ile Trp Leu
                        135
Val Val Ile Ser Trp Ile Val Gly Phe Val His Ala Ile Ser Gln Met
                    150
                                         155
Leu Leu Ile Leu Asp Leu Pro Phe Cys Gly Pro Arg Val Ile Asp Ser
                                     170
Phe Phe Cys Asp Ile Pro Leu Val Met Lys Leu Ala Cys Met Asn Thr
            180
                                 185
Asp Thr Leu Glu Ile Leu Ile Asn Ala Asp Ser Gly Ile Leu Ala Thr
                            200
                                                 205
Thr Trp Phe Ile Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Leu Thr
                                             220
Val Gln His Arg Ser Lys Asp Gly Ser Ser Lys Ala Leu Ser Thr Cys
                    230
                                         235
Thr Ser His Ile Ile Val Val Leu Leu Phe Phe Gly Pro Ile Ile Phe
Ile Tyr Leu Trp Pro Val Ser Ile Thr Trp Val Asp Lys Phe Leu Ala
            260
                                 265
                                                     270
Val Phe Tyr Ser Val Ile Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr
                            280
Leu Arg Asn Lys Asp Ile Lys Asn Ala Ile Lys Lys Leu Ile Ser His
                                             300
Lys
305
<210> 1519
<211> 305
<212> PRT
<213> Mus musculus
<400> 1519
Met Glu Leu Glu Asn Gln Thr Arg Val Ile Glu Phe Phe Leu Leu Gly
 1
                                     10
Leu Ser Glu Asp Pro Glu Leu Gln Pro Ile Leu Phe Gly Leu Phe Leu
                                                     30
Leu Met Tyr Leu Val Thr Val Ser Gly Asn Leu Leu Ile Ile Leu Ala
        35
                            40
Ile Val Ser Asp Ala His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Asn Leu Ser Phe Thr Asp Ile Cys Phe Ser Thr Thr Thr Val Pro Lys
                    70
                                                             80
```

<400> 1518

```
Met Leu Thr Asn Leu Gln Lys Gln Ser Lys Ser Ile Ser Tyr Thr Gly
                                    90
Cys Ile Thr Gln Leu Ser Phe Val Leu Leu Phe Ala Gly Met Glu Asn
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Arg Tyr Thr Asp Ile Met Lys Leu His Leu Cys Phe Val Met
                        135
Ile Phe Leu Ser Leu Tyr Ile Ser Ile Val Asp Ala Leu Leu His Gly
                    150
                                        155
Leu Met Thr Leu Arg Leu Ser Phe Cys Thr Phe Leu Glu Ile Pro His
                165
                                    170
Phe Phe Cys Glu Leu Tyr Gln Val Ile Lys Ile Ala Cys Ser Asp Thr
                                185
Leu Ile Asn Asn Ile Leu Ile Tyr Val Met Ser Ser Ala Leu Gly Gly
                            200
Met Pro Leu Val Gly Ile Ile Phe Ser Tyr Tyr Lys Ile Ile Ser Ser
Ile Leu Arg Met Pro Ser Pro Gly Gly Arg His Lys Ala Phe Ser Thr
                                        235
                    230
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ala Phe
                                    250
Gly Val Tyr Ile Ser Ser Ala Phe Thr Glu Ser Tyr Arg Arg Thr Ser
Val Ala Ser Leu Met Tyr Thr Val Phe Pro Pro Met Leu Asn Pro Phe
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Lys Ala Leu Arg Lys Ile
                        295
Val
305
```

<210> 1520 <211> 312 <212> PRT

<213> Mus musculus

<400> 1520

Met Glu Ser Ala Asn Gln Thr Gly Ile Ser Glu Phe Phe Leu Ile Gly Leu Ile Tyr Val Pro Glu Leu Gin Pro Leu Phe Phe Asp Leu Phe Leu Ser Met Tyr Leu Ile Thr Ile Ile Gly Asn Leu Leu Ile Ile Leu Ala Val Ser Lys Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys 55 60 Asn Leu Ser Phe Thr Asp Ile Cys Thr Ser Thr Thr Thr Val Pro Lys 70 75 Leu Leu Asn Ile Gln Val His Asp Gln Ser Ile Thr Tyr Ile Gly Cys Leu Ser Gln Val Cys Phe Ile Leu Thr Phe Cys Val Leu Glu Arg Cys Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln 120 Pro Leu Arg Tyr Thr Ile Ile Met Asn Pro Phe Leu Cys Ile Cys Leu 140 Val Leu Leu Ser Leu Ile Ile Ser Thr Ile Asn Ala Leu Leu His Thr Leu Leu Val Leu Pro Leu Ser Phe Cys Thr Glu Gln Asn Val Pro Asn

```
170
Phe Phe Cys Glu Leu Gly Gln Ile Thr Lys Leu Ser Cys Ser Asp Thr
                                185
                                                    190
            180
Phe Ile Asn Ile Leu Phe Ile Tyr Thr Ala Thr Ile Val Phe Ser Val
                            200
        195
Ile Pro Leu Ser Gly Ile Ile Phe Ser Tyr Ile Gln Ile Val Ser Ser
Ile Leu Lys Ile Pro Ser Val Gly Gly Arg His Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Leu
                                    250
                245
Gly Val Tyr Met Asn Ala Ser Val Ser Asn Ser Ser Ile Ser Asn Val
            260
                                265
Ile Thr Ser Met Met Tyr Ser Val Val Pro Gln Met Leu Asn Pro Phe
        275 .
Ile Tyr Ser Leu Arg Ser Lys Glu Ile Lys Gly Ser Leu Arg Gln Leu
                        295
                                             300
Ile Ile Gly Ile Ile Cys Phe Pro
                    310
<210> 1521
<211> 311
<212> PRT
<213> Mus musculus
<400> 1521
Met Lys Pro Glu Asn Gln Thr Asn Ile Leu Glu Phe Leu Leu Leu Gly
Phe Ser Gln Tyr Pro Glu His Gln Pro Met Leu Phe Gly Leu Phe Leu
                                25
Leu Met Phe Val Val Ala Val Leu Gly Asn Leu Leu Ile Ile Leu Ala
Val Ser Ile Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
Asn Leu Ser Phe Ser Asp Ile Gly Phe Ile Ser Thr Thr Val Pro Lys
                    70
Met Leu Val Asn Ile Gln Thr Gln Ser Lys Ser Ile Ser Tyr Ala Glu
                                    90
Cys Ile Thr Gln Ile Tyr Phe Phe Met Leu Phe Gly Gly Met Asp Thr
            100
                                105
Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
                            120
Pro Leu His Tyr Ser Val Ile Met Asn Pro Gln Leu Ser Gly Leu Leu
                        135
                                            140
Val Leu Val Ser Trp Phe Ile Ser Phe Ser Tyr Ser Leu Ile Gln Ser
                    150
                                        155
Leu Leu Met Leu Arg Leu Ser Phe Cys Thr Asn Gln Ile Ile Lys His
                165
                                    170
Phe Tyr Cys Glu Tyr Ala Lys Ala Leu Thr Ile Ala Cys Ser Asp Thr
                                185
Leu Ile Asn His Ile Leu Leu Tyr Ile Val Ile Trp Val Leu Gly Phe
                            200
Ile Pro Phe Ser Gly Ile Leu Tyr Ser Tyr Tyr Lys Ile Phe Ser Ser
                                            220
                        215
Ile Leu Arg Ile Pro Ser Thr Asp Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Leu
                                    250
                                                         255
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Ser Val Tyr Leu Ser Ser Asp Ala Thr Ser Ser Ser Gly Lys Gly Val Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Lys Ala Leu Lys Thr Leu 295 Gly Arg Ile Leu Leu Leu Lys <210> 1522 <211> 311 <212> PRT <213> Mus musculus <400> 1522 Met Lys Pro Glu Asn Gln Thr Asn Ile Leu Glu Phe Leu Leu Gly Phe Ser Gln Tyr Pro Glu His Gln Pro Met Leu Phe Gly Leu Phe Leu 25 Leu Met Phe Val Val Ala Val Phe Gly Asn Leu Leu Ile Ile Leu Ala 40 Val Ser Ile Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Ser Asp Ile Gly Phe Ile Ser Thr Thr Ile Pro Lys 70 75 Met Leu Val Asn Ile Gln Thr Gln Ser Lys Ser Ile Ser Tyr Ala Glu 90 Cys Ile Thr Gln Ile Tyr Phe Phe Met Leu Phe Gly Gly Met Asp Thr 100 105 110 Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His 120 125 Pro Leu His Tyr Ser Val Ile Met Asn Pro Gln Leu Ser Gly Leu Leu 135 140 Val Leu Val Ser Trp Phe Ile Ser Phe Ser Tyr Ser Leu Ile Gln Ser 150 155 Leu Leu Met Leu Arg Leu Ser Phe Cys Thr Asn Gln Ile Ile Lys His 170 Phe Tyr Cys Glu Tyr Ser Arg Ala Leu Thr Ile Ala Cys Ser Asp Thr 185 190 Leu Ile Asn His Ile Leu Leu Tyr Ile Leu Ile Cys Val Leu Gly Phe 195 200 205 Ile Pro Phe Ser Gly Ile Leu Tyr Ser Tyr Cys Lys Ile Val Ser Ser 215 220 Ile Leu Arg Ile Pro Ser Thr Asp Gly Lys Tyr Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Leu 250 Gly Val Tyr Leu Ser Ser Asp Val Thr Ser Ser Ser Gly Lys Asp Val 265 Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Lys Ala Leu Lys Thr Leu 295 300

305

Gly Arg Ile Leu Leu Lys

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1523
Met Gln Asn Gln Ser Leu Val Asn Glu Phe Ile Leu Leu Gly Leu Ser
                                    10
Gln Asn Thr Lys Val Glu Lys Ile Leu Phe Leu Leu Phe Leu Leu Ile
            20
                                25
Tyr Leu Ala Thr Ile Gly Gly Asn Met Ile Ile Val Ala Thr Ile Ile
                            40
Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Val Phe
                        55
Leu Ser Leu Leu Asp Ala Cys Thr Ser Thr Val Val Thr Pro Lys Met
                    70
                                        75
Ile Val Gly Phe Phe Tyr Glu Arg Lys Ile Ile Ser Phe Glu Gly Cys
                                    90
Met Thr Gln Leu Phe Ala Ile His Phe Phe Thr Ala Val Glu Val Ile
            100
Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
Leu His Tyr Leu Ser Ile Met Ser Lys Arg Val Cys Gly Val Leu Val
                        135
                                             140
Gly Ile Ala Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Val
                    150
                                        155
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr
                                    170
                165
Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Gln
            180
                                185
                                                     190
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
        195
                            200
Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu
                        215
Arg Ala His Ser Ser Glu Gly Arg Tyr Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Leu Ile
                245
                                    250
Tyr Ala Arg Pro Ser Ser Pro Phe Ser Phe Glu Lys Asn Thr Leu Ile
            260
                                265
Phe Ala Asn Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe
                            280
Arg Asn Lys Glu Met Lys Ser Ala Ile Arg Lys Met Trp Lys Arg Leu
                        295
Val Val Val Ser Asp Lys Tyr
<210> 1524
<211> 304
<212> PRT
<213> Mus musculus
<400> 1524
Met Gln Asn Gln Ser Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Ser
Gln Asn Leu Asn Val Glu Lys Met Leu Phe Val Leu Phe Leu Phe Ile
                                25
Tyr Ile Ala Thr Ile Gly Gly Asn Met Met Ile Val Val Thr Ile Ile
                            40
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Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu Ser Phe Leu Asp Ala Cys Thr Ser Ser Thr Val Thr Pro Lys Ile 75 70 Ile Val Asp Cys Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Cys Cys 90 Met Thr Gln Leu Phe Thr Val His Phe Phe Thr Gly Ala Glu Val Ile Val Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 Leu His Tyr Ser Ser Ile Met Thr Gln Arg Leu Cys Gly Ile Leu Val 135 Val Val Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile 150 155 Phe Thr Leu Gln Leu Pro Leu Cys Gly Pro Asn Val Ile Asp His Tyr 170 165 Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His 185 190 Ile Tyr Val Leu Leu Ile Phe Ala Asn Ser Gly Ala Ile Cys Ile Ile 195 200 Ile Phe Ser Leu Leu Ile Val Ser Tyr Gly Val Ile Leu Phe Ser Leu 215 220 Arg Ala Gln Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly 230 235 Ser His Ile Thr Val Val Leu Leu Phe Phe Val Pro Cys Ile Leu Ile 245 250 Tyr Ala Arg Pro Thr Ser Ala Phe Ser Phe Glu Lys Asn Met Leu Ile 265 260 Phe Val Asn Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe 280 Arg Asn Lys Glu Met Ile Asn Ala Ile Lys Lys Ile Trp Lys Arg Phe

<210> 1525

<211> 311

<212> PRT

<213> Mus musculus

<400> 1525

Met Glu Asn Gln Ser Ile Val Asn Glu Phe Ile Leu Leu Gly Leu Ser Gln Asn Pro Lys Ile Glu Asn Ile Leu Phe Val Val Phe Leu Leu Val 20 25 Tyr Leu Ala Thr Ile Gly Gly Asn Met Met Ile Ile Ala Thr Ile Ile 40 Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ile Phe 55 Leu Ser Leu Leu Asp Thr Cys Thr Ser Thr Val Val Thr Pro Lys Leu 75 Ile Leu Asp Phe Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Gly Cys Met Thr Gln Leu Phe Ala Phe His Phe Phe Thr Gly Ala Glu Val Ile Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 Leu His Tyr Ser Ser Ile Met Thr Trp Arg Leu Cys Gly Val Leu Val Gly Val Ala Trp Thr Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile

```
145
                    150
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp Asn Tyr
                                    170
Ile Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His
                                185
            180
Ile Phe Val Phe Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
       195
                            200
Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu
Arg Gly His Ser Ser Glu Gly Arg Leu Lys Ala Leu Ser Thr Cys Gly
                    230
Ser His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Leu Ile
                245
                                    250
Tyr Ala Arg Thr Thr Ser Pro Phe Pro Tyr Glu Lys Tyr Val Ala Ile
                                265
Phe Val Asn Val Ile Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe
                            280
Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Met Cys Arg Arg Ser
                        295
Lys Val Val Ser Asp Asn Tyr
```

<210> 1526 <211> 311

<212> PRT <213> Mus musculus

<400> 1526

Met Gln Asn Gln Ser Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Ser 10 Gln Asn Leu Tyr Val Glu Lys Ile Leu Phe Val Leu Phe Leu Leu Ile 25 Tyr Leu Ala Thr Ile Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile 40 45 Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ile Phe 55 Leu Ser Leu Leu Asp Ala Leu Thr Ser Ser Thr Val Thr Pro Lys Ile 75 Ile Val Asp Cys Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Cys Cys 90 Met Thr Gln Leu Phe Thr Val His Phe Phe Thr Gly Ala Glu Val Ile 100 105 110 Val Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 125 Leu His Tyr Ser Ser Ile Met Thr Arg Arg Leu Cys Gly Ile Leu Val 135 140 Val Val Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile 150 155 Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr 165 170 Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His 185 190 Ile Tyr Val Leu Leu Ile Phe Ala Asn Ser Gly Ala Ile Cys Ile Ile Ile Phe Ser Leu Leu Val Ser Tyr Gly Ile Ile Leu Phe Ser Leu Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly 230 235

<400> 1527 Met Gln Asn Gln Thr Leu Val Thr Glu Phe Leu Leu Gly Leu Ser Gln Asn Pro Lys Val Gln Lys Ile Val Phe Val Val Phe Leu Phe Ile Tyr Ile Ala Thr Val Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile 40 Cys Ser Arg Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Cys 55 Leu Ser Phe Leu Asp Ala Cys Ile Ser Ser Val Ile Thr Pro Lys Val 75 Thr Val Asp Leu Leu Tyr Glu Lys Arg Thr Ile Ser Phe Glu Gly Cys 90 Met Ala Gln Val Phe Ala Val His Phe Phe Thr Gly Val Glu Val Ile 105 Val Leu Ile Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 Leu Tyr Tyr Ser Ser Ile Met Asn Arg Arg Leu Cys Gly Ile Leu Met 135 140 Gly Met Ala Trp Thr Gly Gly Phe Leu His Ser Thr Ile Gln Ile Ile 150 155 Phe Ile Leu Cys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe 165 170 Leu Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His 185 190 Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Phe Cys Ile Ile 200 Ile Phe Ser Leu Leu Ile Ser Tyr Gly Val Ile Leu Phe Ser Leu 215 220 Arg Thr His Ser Thr Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly 235 Ser His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Ile Ile 250 Tyr Ala Arg Pro Thr Ser Ala Phe Phe Ser Glu Lys Asn Met Phe Leu 265 Phe Ala Thr Ile Leu Thr Pro Leu Leu Asn Pro Met Ile Tyr Thr Phe 280 Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Ile Trp Lys Lys Leu 295 300 Ile Leu Asp Tyr Gly Ile Ser 310

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<210> 1528
<211> 311
<212> PRT
<213> Mus musculus
<400> 1528
Met His Asn Gln Ser Tyr Val Asn Glu Phe Ile Leu Leu Gly Leu Ser
Gln Asn Pro Gln Ile Glu Lys Ile Ser Phe Phe Ile Phe Leu Leu Val
Tyr Leu Ala Thr Leu Val Gly Asn Met Ile Ile Val Val Thr Ile Val
Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe
                        55
Leu Ser Phe Leu Asp Ala Cys Val Ser Ser Val Val Thr Pro Lys Met
                    70
                                         75
Ile Ala Asp Met Thr Tyr Glu Arg Lys Ile Ile Ser Phe Glu Cys Cys
                                     90
Met Thr Gln Val Phe Ala Val His Phe Leu Thr Ala Val Glu Val Ile
                                 105
Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
                                                 125
Leu His Tyr Ser Phe Ile Met Asn Arg Arg Leu Cys Gly Thr Leu Val
                        135
                                             140
Gly Val Ala Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ala
                    150
                                         155
Phe Thr Leu Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe
                                     170
Ile Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Ile His
                                 185
                                                     190
Ile Phe Ile Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
        195
                            200
Ile Phe Ser Phe Leu Leu Ile Ser Tyr Gly Val Ile Leu Phe Ser Leu
                        215
                                             220
Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                    230
                                         235
Ser His Ile Thr Val Val Val Phe Phe Phe Val Pro Cys Ile Leu Ile
                                     250
Tyr Ala Arg Pro Thr Ser Ala Phe Ser Phe Glu Lys Asn Val Phe Val
                                 265
Phe Thr Asp Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe
        275
                            280
Arg Asn Lys Glu Met Ile Asn Ala Ile Gly Lys Met Arg Lys Arg Leu
                        295
Ile Met Val Pro Asp Lys Tyr
<210> 1529
<211> 307
<212> PRT
<213> Mus musculus
<400> 1529
Met Gln Gln Asn Ser Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                5
                                    10
                                                         15
Gln Asp Pro Leu Lys Gln Lys Met Val Phe Ile Ile Phe Leu Val Phe
                                                     30
            20
                                25
```

```
Tyr Met Gly Thr Val Val Gly Asn Thr Leu Ile Ile Val Thr Ile Lys
Phe Ser Arg Thr Leu Gly Gly Pro Met Tyr Phe Phe Leu Phe Tyr Leu
                        55
Ser Phe Ala Asp Ser Cys Phe Ser Thr Ser Thr Ala Pro Arg Leu Ile
                    70
                                        75
Val Asp Ala Leu Ser Lys Lys Asn Ile Ile Ser Tyr Asn Glu Cys Met
                                    90
Thr Gln Val Phe Ala Leu His Leu Phe Gly Cys Met Glu Val Phe Val
                                105
Leu Ile Phe Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Pro Val Ile Met Arg Arg Gln Val Cys Val Ile Leu Ile Ile
                        135
Val Ala Trp Ile Gly Ser Phe Leu His Ser Thr Thr Gln Ile Val Leu
                                        155
Ala Leu Arg Leu Pro Phe Cys Gly Pro Asn Leu Ile Asp His Tyr Cys
                                    170
Cys Asp Leu Gln Pro Leu Leu Glu Leu Ala Cys Met Asp Thr His Met
                                185
Ile Asn Leu Leu Val Phe Asn Ser Gly Ala Ile Cys Ser Ser Ser
                            200
                                                205
Phe Leu Ile Phe Ile Ile Ser Tyr Phe Val Ile Leu Tyr Ser Leu Arg
                        215
Asn His Ser Ala Glu Gly Arg Lys Lys Ala Leu Ser Thr Cys Thr Ser
                    230
                                        235
His Ile Ile Val Val Leu Ser Phe Gly Pro Cys Ile Phe Ile Tyr
                                    250
Ala Arg Pro Pro Thr Thr Phe Ser Met Asp Lys Met Val Thr Val Phe
                                265
Phe Thr Ile Gly Ser Pro Phe Leu Asn Pro Ile Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp His Val Lys Ile
                        295
                                            300
Met Thr Glu
305
<210> 1530
<211> 307
<212> PRT
<213> Mus musculus
<400> 1530
Met Gln Gln Asn Ser Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Gln Asp Pro Leu Lys Gln Lys Met Val Phe Ile Ile Phe Leu Val Phe
                                25
Tyr Leu Gly Thr Val Val Gly Asn Thr Leu Ile Ile Val Thr Ile Lys
                            40
Phe Ser Arg Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu
                                            60
Ser Phe Ser Asp Ser Cys Phe Ser Thr Ser Thr Ala Pro Arg Leu Ile
```

Val Asp Ala Leu Ser Lys Lys Asn Ile Ile Ser Tyr Asn Glu Cys Met

Thr Gln Val Phe Ala Leu His Leu Phe Gly Cys Met Asp Val Phe Ile 100 105 110 Leu Ile Phe Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu

75

95

90

```
115
                            120
                                                 125
Arg Tyr Ser Val Ile Met Arg Arg Gln Val Cys Val Ile Leu Ile Ile
    130
                        135
                                            140
Val Ala Trp Ile Gly Ser Phe Leu His Ser Thr Thr Gln Ile Val Leu
                    150
                                        155
Ala Leu Arg Leu Pro Phe Cys Gly Pro Asn Leu Ile Asp His Tyr Cys
                165
                                    170
                                                         175
Cys Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Met Asp Thr Tyr Met
                                185
Ile Asn Leu Leu Val Phe Asn Ser Gly Ala Ile Cys Ser Ser Ser
                            200
                                                 205
Phe Val Ile Leu Ile Ile Ser Tyr Phe Val Ile Leu His Ser Leu Arg
                        215
                                             220
Asn His Ser Ala Glu Gly Arg Lys Lys Ala Leu Ser Thr Cys Thr Ser
                    230
                                         235
His Ile Ile Val Val Ile Leu Ser Phe Val Pro Cys Ile Phe Ile Tyr
                                    250
Ala Arg Pro Pro Thr Thr Phe Pro Met Asp Lys Met Val Thr Val Phe
            260
                                265
                                                     270
Tyr Thr Ile Gly Thr Pro Phe Leu Asn Pro Ile Ile Tyr Thr Leu Arg
                            280
                                                 285
Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp His Val Lys Phe
                        295
                                             300
Ile Met Lys
305
<210> 1531
<211> 307
<212> PRT
<213> Mus musculus
<400> 1531
Met Gln His Asn Ser Thr Val Thr Lys Phe Ile Leu Leu Gly Leu Thr
                                     10
Gln Asp Pro Leu Lys Gln Lys Met Val Phe Ile Ile Phe Leu Val Phe
Tyr Leu Gly Thr Val Val Gly Asn Thr Leu Ile Ile Met Thr Ile Lys
                            40
Phe Ser Arg Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu
Ser Phe Ala Asp Ser Cys Phe Ser Thr Ser Thr Ala Pro Arg Leu Ile
                    70
                                         75
Val Asp Ala Leu Ser Lys Lys Asn Ile Ile Ser Tyr Asn Glu Cys Met
                                     90
Thr Gln Val Phe Ala Leu His Leu Phe Gly Cys Met Glu Ile Phe Val
            100
                                105
Leu Ile Leu Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
Arg Tyr Pro Val Ile Met Ser Arg Gln Val Cys Val Ile Leu Ile Ile
    130
                        135
Leu Ala Trp Ile Gly Ser Phe Ile His Ser Thr Ala Gln Ile Val Leu
                    150
                                        155
Ala Leu Arg Leu Pro Phe Cys Gly Pro Asn Leu Ile Asp His Tyr Cys
                165
                                    170
                                                         175
Cys Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Met Asp Thr Tyr Met
            180
                                185
                                                     190
```

Ile Asn Leu Leu Val Ser Asn Ser Gly Ala Ile Cys Ser Ser Ser

```
Phe Val Ile Leu Ile Ile Ser Tyr Phe Val Ile Leu His Ser Leu Arg
Asn His Ser Ala Glu Gly Arg Lys Lys Ala Leu Ser Thr Cys Thr Ser
                    230
His Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Ile Tyr
Ala Arg Pro Pro Thr Thr Phe Ser Met Asp Lys Met Val Ala Val Phe
            260
                                265
Tyr Thr Ile Gly Thr Pro Phe Leu Asn Pro Ile Ile Tyr Thr Leu Arg
                            280
Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp His Val Lys Ile
Met Asn Glu
305
```

<210> 1532 <211> 311 <212> PRT

<213> Mus musculus

<400> 1532 Met Gln Asn Gln Ser Ser Val Thr Glu Phe Ile Ile Leu Gly Leu Ser 10 Gln Asn Pro Lys Ile Glu Lys Ile Leu Phe Val Val Phe Leu Leu Val 20 25 Tyr Met Ala Thr Val Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile 40 Tyr Ser Pro Ala Leu Leu Ser Ser Pro Met Tyr Phe Phe Leu Ala Phe 55 Leu Ser Phe Leu Asp Ala Cys Val Ser Ser Thr Val Thr Pro Lys Met 70 75 Val Val Asp Phe Leu His Glu Lys Lys Thr Ile Ser Phe Gly Cys Cys 90 85 Met Thr Gln Leu Phe Ser Val His Phe Phe Ser Gly Ala Glu Met Ile 100 105 Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 125 Leu His Tyr Ser Ser Ile Leu Thr Arg Arg Leu Cys Ser Ile Leu Val 135 140 Ala Ile Ser Trp Ala Gly Gly Phe Leu His Ala Ile Val Gln Val Ile 150 155 Phe Arg Leu Gln Leu Pro Leu Cys Gly Pro Asn Val Ile Asp His Tyr 165 170 Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His 180 185 190 Ile Phe Val Leu Leu Val Phe Ala Asn Ser Gly Ala Ile Cys Ile Ile 200 Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu 215 220 Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly 230 235 Ala His Val Thr Val Val Leu Phe Leu Val Pro Cys Ile Leu Ile 245 250 Tyr Ala Arg Asp Thr Ser Ala Phe Ser Tyr Glu Lys Asp Thr Leu Ile 260 265 270 Phe Val Asn Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe 280 Arg Asn Lys Glu Met Ile Asn Ala Ile Arg Lys Met Trp Lys Arg Leu

```
290
                        295
                                            300
Ile Val Ile Phe Val Arg Tyr
                    310
305
<210> 1533
<211> 311
<212> PRT
<213> Mus musculus
<400> 1533
Met Leu Asn Gln Ser Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Ser
                                    10
Gln Asn Pro Lys Val Glu Lys Ile Leu Phe Val Leu Phe Phe Leu Val
            20
Tyr Leu Ala Thr Ile Gly Gly Asn Ile Val Ile Val Val Thr Ile Leu
                            40
                                                45
Phe Ser Pro Ala Leu Phe Gly Ser Pro Met Tyr Phe Phe Leu Ser Phe
                        55
Leu Ser Phe Leu Asp Ala Cys Ile Ser Ser Val Ile Thr Pro Lys Met
                    70
                                        75
Ile Val Asp Phe Phe Tyr Glu Thr Lys Thr Ile Ser Phe Glu Cys Cys
                                    90
Met Val Gln Leu Phe Ala Val His Phe Phe Thr Gly Val Glu Val Ile
                                105
Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
Leu His Tyr Ser Ser Ile Met Asn Gln Arg Leu Cys Val Ile Leu Val
                        135
Gly Ile Ala Trp Ala Gly Gly Phe Leu His Ser Ile Thr Gln Ile Ile
                    150
                                        155
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Glu His Phe
                                    170
Ile Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asn Thr His
            180
                                185
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
                            200
Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu
                        215
Arg Ser His Ser Ser Glu Gly Trp Ser Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Thr Val Val Leu Leu Phe Phe Val Pro Cys Ile Leu Ile
                245
                                    250
Tyr Ala Arg Asn Thr Ser Ala Phe Ser Phe Glu Lys Asn Val Phe Ile
            260
                                265
Phe Ala Asp Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe
       275
                            280
Arg Asn Lys Glu Met Lys Asn Ala Ile Lys Lys Ile Trp Arg Arg Leu
                        295
                                            300
Phe Asn Ile Ser Asp Lys His
                    310
```

```
<210> 1534
<211> 311
<212> PRT
<213> Mus musculus
```

<400> 1534

```
Gln Asn Ser Lys Val Glu Lys Ile Leu Phe Phe Ile Phe Leu Leu Ile
Tyr Leu Ala Thr Ile Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile
Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ile Phe
Leu Ser Leu Leu Asp Ala Cys Thr Ser Ser Thr Val Thr Pro Lys Met
Ile Val Asp Phe Phe Tyr Asp Arg Lys Thr Ile Ser Phe Glu Cys Cys
Met Thr Gln Leu Phe Ala Val His Phe Phe Thr Gly Met Glu Val Ile
            100
                                105
Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
Leu His Tyr Ser Ser Ile Met Asn Arg Arg Leu Cys Gly Asn Leu Val
                        135
                                            140
Met Val Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile
                    150
                                        155
Phe Met Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr
                165
                                    170
Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Tyr
            180
                                185
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
                            200
        195
Ile Phe Ser Ile Leu Leu Val Ser Tyr Gly Val Ile Leu Tyr Ser Leu
                        215
                                            220
Lys Ala His Ser Ser Glu Gly Lys Phe Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Ile Val Val Leu Phe Phe Val Pro Cys Ile Leu Thr
                245
                                    250
Tyr Ala Arg Pro Ile Ser Ala Phe Ser Phe Glu Lys Asn Ala Val Val
            260
                                265
Phe Thr Thr Val Leu Thr Pro Leu Leu Asn Ser Val Val Tyr Thr Phe
                            280
Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Met Trp Lys Lys Leu
Ile Ala Val Ser Asp Lys His
<210> 1535
<211> 319
<212> PRT
<213> Mus musculus
<400> 1535
Met Thr Ala Arg Asn Met Thr Thr Met Ser Gly Phe Leu Leu Met Gly
Phe Ser Asp Asn His Glu Leu Gln Ile Leu Gln Ala Leu Leu Phe Leu
Leu Thr Tyr Leu Leu Gly Ser Ala Gly Asn Phe Ile Ile Ile Thr Ile
Thr Thr Leu Asp Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys
```

55

70

Gln Leu Ser Thr Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln

Tyr Val Ala Ser Ser Leu Ala Arg Ser Gly Tyr Ile Ser Tyr Gly Gln

Met Asn Asn Gln Ser Cys Val Thr Glu Phe Ile Phe Leu Gly Leu Ser

```
Cys Met Leu Gln Ile Phe Phe Phe Thr Gly Leu Ala Trp Ser Glu Met
                                105
                                                     110
Ala Thr Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu
                            120
                                                 125
Pro Leu His Tyr Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala
                        135
                                             140
Val Ala Ala Val Trp Leu Ser Gly Gly Ile Ser Gly Thr Leu Phe Thr
                    150
                                         155
Ala Ser Thr Leu Ser Ile Arg Phe Cys Gly Asp Lys Ile Ile His Gln
                                    170
Phe Phe Cys Asp Ile Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp
            180
                                185
                                                     190
Tyr Phe Gly Val Leu Glu Val Ser Thr Phe Met Ser Val Met Ala Phe
                            200
                                                 205
        195
Ala Cys Phe Val Gly Ile Ala Phe Ser Tyr Gly Gln Ile Phe Ser Thr
                                             220
Val Leu Arg Met Pro Ser Ala Glu Gly Arg Ser Lys Val Phe Ser Thr
                    230
                                         235
Cys Leu Pro His Leu Phe Val Val Ser Phe Phe Leu Ser Thr Gly Ile
                                     250
                                                         255
Cys Ala Tyr Leu Lys Pro Thr Ser Asp Ser Pro Thr Ala Leu Asp Leu
                                265
                                                     270
Met Leu Ser Ile Phe Tyr Thr Leu Leu Pro Pro Thr Leu Asn Pro Val
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Glu Ser Leu Lys Arg Ala Leu Lys Lys Leu
                                             300
Leu Leu Ser Glu Glu Phe Ile Arg Lys Lys Cys Leu Phe Tyr Phe
```

<210> 1536

<211> 315

<212> PRT

<213> Mus musculus

<400> 1536

Met Ser Lys Met Asp Gly Gly Asn His Ser Leu Val Ser Glu Phe Val 10 Leu Leu Gly Leu Ala His Ser Gln Asn Ile Gln Ala Leu Leu Phe Met Ile Phe Leu Met Leu Tyr Leu Leu Ile Val Ser Gly Asn Ile Val Ile Met Val Leu Ile Thr Thr Asp Pro His Leu His Ser Pro Met Tyr Phe 55 Leu Leu Ala Asn Leu Ser Phe Val Asp Met Trp Leu Ser Ser Val Thr 75 Thr Pro Lys Met Ile Thr Asp Phe Phe Arg Glu Asn Lys Thr Ile Ser 90 Phe Ser Gly Cys Met Ser Gln Val Phe Phe Ala His Cys Ile Ala Ala 100 105 110 Gly Glu Met Val Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala 120 125 Ile Cys Lys Pro Leu His Tyr Phe Thr Ile Met Asn Leu Lys Arg Cys 135 140 Thr Gly Leu Val Leu Thr Ser Trp Thr Ile Gly Phe Val His Ala Leu 150 155 Ser His Leu Val Val Ile Val Glu Leu Pro Phe Cys Ser Ala Lys Glu 175 170

```
Ile Asp Ser Phe Phe Cys Asp Met Pro Leu Val Ile Lys Leu Ala Cys
                                185
Met Asp Ser His Asn Leu Asp Ile Leu Met Tyr Ala Asp Cys Gly Val
        195
                            200
Val Gly Val Thr Cys Phe Ile Leu Leu Leu Ile Ser Tyr Thr Tyr Ile
Leu Ile Thr Val Arg Arg Ser Ser Lys Ala Gly Ala Ser Lys Ala Leu
                    230
                                        235
Ser Thr Cys Thr Ala His Ile Thr Val Val Met Ile Phe Phe Val Pro
Cys Ile Phe Ile Tyr Val Trp Pro Leu Asn Ile Thr Trp Leu Asp Lys
                                265
Phe Leu Ala Val Phe Tyr Ser Val Phe Thr Pro Leu Leu Asn Pro Ala
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Met Lys Asn Ala Met Arg Arg Phe
   290
                        295
Ile Asn Asn Tyr Met Asp Ser Gln Gly Lys Ser
                    310
```

<210> 1537 <211> 312 <212> PRT

<213> Mus musculus

<400> 1537

Met Asp Gly Asp Asn Gln Thr Val Val Ser Glu Phe Val Leu Leu Gly Leu Ser Asn Ser Lys Asn Leu Gln Val Leu Leu Phe Leu Ile Phe Leu Leu Leu Tyr Leu Leu Ile Met Ser Gly Asn Ile Val Ile Gln Ile Leu 35 Ile Thr Thr Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Phe Val Asp Met Leu Leu Ser Ser Asn Thr Thr Pro Arg 70 Met Ile Ile Asp Phe Phe Arg Glu Lys Lys Thr Ile Ser Phe Ala Gly 90 Cys Met Ser Gln Ile Phe Phe Ser His Cys Ile Ala Ser Gly Glu Val 105 Val Leu Leu Ala Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu His Tyr Phe Thr Ile Met Asn Leu Lys Arg Cys Thr Gly Leu 135 140 Val Leu Thr Ser Trp Thr Ile Gly Phe Leu His Gly Ile Ser His Val 150 155 Val Val Leu Leu Gln Leu Pro Phe Cys Gly Pro Asn Lys Ile Asp Ser 170 Phe Phe Cys Asp Met Pro Leu Val Ile Lys Leu Ala Cys Met Asp Ser 180 185 Gln Asp Leu Asn Thr Leu Met Asn Gly Glu Cys Gly Ile Leu Ala Val 200 Thr Cys Phe Ile Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Ile Thr 215 220 Val His Gln Asn Ser Lys Thr Gly Ala Ser Lys Ala Leu Ser Thr Cys 230 235 Thr Ala His Ile Thr Val Val Met Ile Phe Phe Leu Pro Cys Phe Phe 250 Ile Tyr Val Phe Pro Leu Asn Ile Thr Trp Leu Asp Lys Phe Leu Ala

260 265 Val Phe Tyr Ser Val Ile Thr Pro Leu Leu Asn Pro Val Ile Tyr Thr 275 280 285 Leu Arg Asn Lys Glu Met Lys Asn Ala Met Lys Arg Phe Ile Gly Lys 295 300 Phe Leu Arg Ala Lys Gly Asn Ser 310 <210> 1538 <211> 312 <212> PRT <213> Mus musculus <400> 1538 Met Asp Gly Ser Asn Arg Ser Leu Val Ser Glu Phe Val Leu Leu Gly 10 Leu Ala Arg Ser Gln Asn Leu Gln Val Leu Leu Phe Ile Ile Phe Leu Val Val Tyr Leu Leu Ile Leu Ser Gly Asn Thr Ile Val Met Phe Leu 40 Ile Ile Thr Asp Lys Asn Leu His Ser Pro Met Tyr Phe Phe Leu Ala 55 60 Asn Leu Ser Phe Val Asp Met Trp Leu Ser Ser Ala Thr Thr Pro Lys 70 75 80 Met Ile Thr Asp Phe Leu Lys Glu Pro Lys Ile Ile Ser Phe Ala Gly 90 Cys Met Ser Gln Val Phe Phe Asp His Cys Val Gly Ala Val Glu Met 105 Leu Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu His Tyr Phe Thr Ile Met Ser Leu Lys Arg Cys Ala Gly Leu 135 140 Val Leu Thr Ser Trp Ala Ile Ala Phe Val His Ala Met Ser Gln Leu 155 Leu Ala Val Val Gln Leu Pro Leu Cys Gly His Met Glu Ile Asp Ser 170 Phe Phe Cys Asp Ile Pro Leu Ile Ile Lys Leu Ala Cys Met Asp Ser 180 His Ile Leu Asp Ile Tyr Met Asn Val Asp Cys Gly Phe Val Val Val 200 Thr Cys Phe Ile Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Leu Thr 215 220 Val Arg Gln Ser Ser Lys Ala Gly Ala Ser Lys Ala Leu Ser Thr Cys 230 235 Thr Ala His Ile Thr Val Val Met Ile Phe Phe Val Pro Cys Ile Phe 250 Ile Tyr Val Trp Pro Leu Ser Ile Thr Trp Leu Asp Lys Phe Leu Ala 265 Val Phe Tyr Thr Val Phe Ala Pro Leu Leu Asn Pro Ala Ile Tyr Thr 275 280 Leu Arg Asn Lys Glu Met Arg Asn Ala Val Lys Lys Leu Lys Asn His 290 295 300 Phe Met Asp Tyr Lys Gly Asn Thr 310

35 40 45
Ile Thr Thr Asp Thr His Leu His Ser Pro Met Tyr Phe Leu Leu Ala

```
55
Asn Leu Ser Phe Val Asp Met Trp Leu Ser Thr Asn Thr Thr Pro Lys
                    70
                                         75
                                                             80
Met Ile Thr Asp Phe Leu Arg Glu Ile Lys Ile Ile Ser Phe Ala Gly
                85
                                    90
Cys Met Ser Gln Val Phe Phe Ser His Cys Ile Ala Ala Gly Glu Met
                                105
                                                     110
Val Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Phe Thr Ile Met Asn Leu Lys Arg Cys Ser Ser Leu
                        135
                                            140
Val Leu Thr Ser Trp Thr Ile Gly Phe Ile His Gly Ile Ile Tyr Ile
                    150
                                         155
Val Val Ile Val His Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp Ser
                                    170
                                                         175
Phe Phe Cys Asp Met Pro Leu Val Ile Lys Leu Ala Cys Met Asp Tyr
            180
                                185
                                                     190
His Tyr Leu Asn Thr Leu Met Asn Ala Asp Cys Gly Leu Val Ala Ile
                            200
                                                 205
Thr Cys Phe Ile Leu Leu Thr Ser Tyr Thr Tyr Ile Leu Met Thr
                                             220
Val Cys Lys Ser Ser Lys Ala Gly Ala Ser Lys Ala Met Asn Thr Cys
                    230
                                         235
Thr Ala His Ile Thr Val Val Leu Ile Phe Phe Val Pro Cys Ile Phe
                                     250
                245
Ile Tyr Val Trp Pro Leu Asn Ile Thr Trp Leu Asp Lys Phe Phe Ala
                                265
                                                     270
            260
Val Phe Tyr Ser Val Phe Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr
        275
                            280
Leu Arg Asn Lys Glu Met Lys Asn Ala Met Lys Arg Phe Ile Gly Asn
                                             300
                        295
Phe Leu Gly Pro Lys Val Asn Leu
                    310
<210> 1541
<211> 308
<212> PRT
<213> Mus musculus
<400> 1541
Met Ser Pro Arg Cys Gln Asn Leu Cys Phe Trp Asp Phe Pro Ala His
                                     10
Arg Ile Phe Arg Tyr Leu Leu Phe Val Ile Phe Leu Ile Leu Tyr Leu
            20
Leu Ile Ile Ser Gly Asn Ile Val Ile Met Ile Leu Ile Thr Ile Asp
Arg His Leu His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Phe
                        55
Val Asp Ile Trp Leu Ser Ser Val Thr Thr Pro Lys Met Val Ile Asp
                    70
                                                             8.0
Phe Leu Arg Glu His Lys Thr Ile Ser Phe Glu Gly Cys Met Ser Gln
                                     90
Val Phe Phe Ala His Cys Ile Ala Ala Gly Glu Met Val Leu Leu Leu
            100
                                105
                                                     110
Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr
                            120
                                                 125
```

Phe Thr Ile Met Asn Leu Lys Arg Cys Thr Gly Leu Val Leu Thr Ser

135

```
Trp Thr Val Gly Phe Val His Ala Leu Ser Gln Leu Val Ala Val Leu
Gln Leu Pro Leu Cys Gly Pro Leu Glu Ile Asp Ser Phe Phe Cys Asp
                165
                                    170
Met Pro Leu Val Ile Lys Leu Ala Cys Thr Asp Ser His Asp Leu Asp
                                185
                                                    190
Ile Leu Met Asn Ala Asp Cys Gly Ile Val Val Ser Cys Phe Ile
       195
                            200
Met Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Ile Thr Val Arg Arg Ser
                        215
Ser Lys Ala Gly Ala Ser Lys Ala Leu Ser Thr Cys Thr Ala His Ile
                    230
                                        235
Thr Val Val Met Leu Leu Phe Leu Pro Cys Ile Phe Ile Tyr Val Trp
                245
                                    250
Pro Leu Asn Ile Thr Trp Leu Asp Lys Phe Leu Ala Val Phe Tyr Ser
                                265
Val Val Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr Leu Arg Asn Lys
                            280
Glu Ile Lys Asn Ala Leu Lys Arg Phe Lys Ser Tyr Val Met Asn His
                        295
Lys Val Asn Thr
305
<210> 1542
<211> 309
<212> PRT
<213> Mus musculus
<400> 1542
Met Thr Ala Glu Asn Gln Ser Thr Val Thr Glu Phe Ile Leu Gly Gly
                                    10
Leu Thr Asn Arg Pro Glu Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu
           20
                                25
Gly Ile Tyr Val Val Thr Met Val Gly Asn Leu Gly Met Ile Thr Leu
                            40
                                                4.5
Ile Gly Leu Asn Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                            60
                        55
Asn Leu Ser Leu Val Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys
                    70
                                        75
Met Leu Ile Asn Phe Val Ser Gln Arg Asn Leu Ile Ser Tyr Val Gly
                                    90
Cys Met Ser Gln Leu Tyr Phe Phe Leu Val Phe Val Ile Ala Glu Cys
           100
                                105
Tyr Met Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln
                            120
                                                125
Pro Leu Leu Tyr Asn Ile Ile Met Ser Pro Ala Leu Cys Ser Leu Leu
                        135
                                            140
Val Ala Phe Val Tyr Ala Val Gly Leu Ile Gly Ser Ala Ile Glu Thr
                   150
                                        155
```

Gly Leu Met Leu Lys Leu Asn Tyr Cys Glu Asp Leu Ile Ser His Tyr

Phe Cys Asp Ile Leu Pro Leu Met Lys Leu Ser Cys Ser Ser Thr Tyr

Asp Val Glu Met Ala Val Phe Phe Leu Ala Gly Phe Asp Ile Ile Val

Leu Arg Ile Ser Ser Asn Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys

200 Thr Ser Leu Thr Val Leu Ile Ser Tyr Ala Phe Ile Leu Ser Ser Ile

185

170

190

165

180

```
225
                    230
                                         235
Ser Ser His Phe Ala Ala Val Gly Leu Phe Tyr Gly Ser Thr Ala Phe
                245
                                    250
Met Tyr Leu Lys Pro Ser Thr Ala Ser Ser Leu Ala Gln Glu Asn Val
                                265
Ala Ser Val Phe Tyr Thr Thr Val Ile Pro Met Phe Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Thr Ala Leu Asp Lys Thr Leu
                        295
                                             300
Arg Arg Lys Val Phe
305
<210> 1543
<211> 309
<212> PRT
<213> Mus musculus
<400> 1543
Met Ala Ala Glu Asn Gln Ser Thr Val Thr Glu Phe Ile Leu Arg Gly
Leu Thr Asn Arg Pro Glu Leu Gln Leu Pro Leu Leu Leu Phe Leu
                                25
Gly Ile Tyr Ile Ile Thr Met Val Gly Asn Leu Gly Met Ile Thr Leu
        35
                            40
Ile Gly Leu Asn Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Leu Val Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys
                    70
                                         75
Met Leu Ile Asn Phe Val Ser Gln Arg Asn Leu Ile Ser Tyr Val Gly
                                     90
Cys Met Ser Gln Leu Tyr Phe Phe Leu Val Phe Val Ile Ala Glu Cys
Tyr Met Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln
                            120
Pro Leu Leu Tyr Asn Ile Ile Met Ser Pro Ala Leu Cys Ser Leu Leu
                        135
                                            140
Val Val Phe Val Tyr Ala Met Gly Leu Ile Gly Ser Thr Ile Glu Thr
                    150
                                         155
Ser Leu Met Leu Lys Leu Asn Tyr Cys Glu Asp Leu Ile Ser His Tyr
                                    170
Phe Cys Asp Ile Leu Pro Leu Met Lys Leu Ser Cys Ser Ser Thr Tyr
                                185
Asp Ile Glu Met Ala Val Phe Phe Leu Ala Gly Phe Asn Ile Ile Val
        195
                            200
Thr Ser Leu Thr Val Leu Ile Ser Tyr Ala Phe Ile Leu Ser Ser Ile
Leu Arg Ile Ser Ser Asn Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                         235
Ser Ser His Phe Ala Ala Val Gly Leu Phe Tyr Gly Ser Thr Ala Phe
                                     250
Met Tyr Leu Lys Pro Ser Thr Ala Ser Ser Leu Ala Gln Glu Asn Val
            260
                                265
                                                     270
Ala Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Thr Ala Leu Asp Lys Thr Leu
                        295
                                            300
Arg Arg Arg Val Phe
305
```

```
<210> 1544
<211> 310
<212> PRT
<213> Mus musculus
<400> 1544
Met Thr Ala Lys Asn Ser Ser Val Thr Glu Phe Ile Leu Ala Gly Leu
Thr Asp Gln Pro Gly Leu Arg Met Pro Leu Phe Phe Leu Phe Leu Gly
            20
                                 25
Phe Tyr Met Val Thr Val Val Gly Asn Leu Gly Leu Ile Ser Leu Ile
                            40
Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
Leu Ser Leu Ile Asp Phe Cys Tyr Ser Ser Thr Ile Ser Pro Lys Met
                    70
Leu Met Ser Phe Ile Ser Lys Lys Asn Ile Ile Ser His Pro Gly Cys
                                                         95
                                     90
Met Ala Gln Leu Phe Phe Phe Cys Phe Phe Val Ile Ser Glu Ser Phe
                                 105
Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                            120
Leu Met Tyr Met Val Thr Met Ser Pro Gln Val Cys Leu Leu Leu
                        135
                                             140
Phe Gly Val Tyr Leu Met Gly Phe Val Gly Ala Met Ala His Thr Ile
                    150
                                         155
Ser Met Ala Arg Leu Thr Phe Cys Ala Asp Asn Ile Val Asn His Tyr
                                     170
Met Cys Asp Ile Leu Pro Leu Leu Glu His Ser Cys Thr Ser Thr Tyr
                                 185
Val Asn Glu Leu Val Val Phe Ile Phe Val Ser Phe Asp Ile Gly Val
                            200
                                                 205
Pro Ile Val Thr Ile Phe Ile Ser Tyr Ala Leu Ile Leu Ser Ser Ile
                        215
                                             220
Leu His Met His Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                         235
Ser Ser His Met Ile Val Val Cys Leu Phe Phe Gly Ser Gly Ala Phe
                245
                                     250
Met Tyr Leu Gln Pro Pro Ser Val Leu Ser Leu Asp Gln Gly Lys Val
                                                     270
Ser Ser Leu Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Val Arg Lys Thr Leu
                        295
                                             300
Asp Arg Arg Ile Phe Ser
305
                    310
<210> 1545
<211> 310
<212> PRT
<213> Mus musculus
<400> 1545
Met Thr Ala Lys Asn Ser Ser Val Ile Glu Phe Ile Leu Ala Gly Leu
                                    10
Thr Asp Gln Pro Gly Leu Arg Met Pro Leu Phe Phe Leu Phe Leu Gly
```

```
Phe Tyr Met Val Thr Val Val Gly Asn Leu Gly Leu Ile Ser Leu Ile
                            40
Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
                        55
Leu Ser Val Ile Asp Phe Cys Tyr Ser Ser Thr Ile Ile Pro Lys Met
                    70
                                         75
Leu Met Asn Phe Ile Ser Arg Lys Asn Ile Ile Ser His Ser Gly Cys
                                    90
Met Thr Gln Leu Phe Phe Cys Phe Phe Val Val Ser Glu Ser Phe
Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                            120
Leu Met Tyr Thr Val Thr Met Ser Pro Gln Val Tyr Leu Leu Leu Leu
                        135
                                             140
Leu Gly Val Tyr Val Met Gly Phe Ser Gly Ala Met Ala His Thr Gly
                    150
                                         155
Asn Leu Met Asn Leu Thr Phe Cys Ala Asp Asn Leu Ile Asn His Phe
                                    170
Met Cys Asp Ile Leu Pro Leu Leu Glu Leu Ser Cys Asn Ser Thr Phe
                                185
                                                     190
Ile Asn Glu Leu Val Ile Phe Ile Val Val Ala Phe Asp Ile Gly Val
        195
                            200
                                                205
Pro Ile Val Thr Ile Phe Ile Ser Tyr Ala Leu Ile Leu Ser Ser Ile
                        215
                                             220
Leu Arg Met His Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr Tyr
                    230
                                        235
Ser Ser His Leu Ile Val Val Cys Leu Phe Phe Gly Ser Gly Ala Phe
                                    250
Met Tyr Leu Lys Pro Pro Ser Ile Leu Pro Leu Asp Gln Gly Lys Val
            260
                                265
                                                     270
Ser Ser Leu Phe Tyr Met Ile Val Val Pro Met Leu Asn Pro Leu Ile
                            280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr Leu
                        295
Gly Lys Arg Ile Leu Ser
305
<210> 1546
<211> 313
<212> PRT
<213> Mus musculus
<400> 1546
Met Leu Lys Ser Asn Thr Thr Phe Val Thr Glu Phe Leu Phe Glu Gly
                                    10
Phe Ser Gly Phe Gly Trp Gln His Arg Leu Ala Phe Phe Ala Ile Phe
                                25
Leu Ala Leu Tyr Phe Leu Thr Leu Ser Gly Asn Val Ile Ile Val Ser
Ile Ile His Leu Asp His His Leu His Thr Pro Met Tyr Phe Phe Leu
Ala Ile Leu Ser Ile Ser Asp Thr Cys Tyr Thr Val Thr Ile Ile Pro
                                        75
                    70
Arg Met Leu Ser Asp Leu Leu Asn Pro Tyr His Thr Ile Ala Phe Arg
                                    90
Asp Cys Val Val Gln Ile Phe Phe Tyr Leu Thr Phe Gly Ile Asn Asn
                                105
```

```
Cys Phe Leu Leu Met Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
Asn Pro Leu Arg Tyr Ser Val Ile Met Gly Arg Lys Ala Cys Val His
Leu Ala Ser Gly Ser Leu Gly Ile Gly Leu Gly Met Ala Ile Val Gln
                    150
Val Thr Ser Val Phe Ser Leu Pro Phe Cys Asp Arg Phe Val Ile Pro
                                    170
His Phe Phe Cys Asp Val Arg Pro Leu Leu Lys Leu Ala Cys Thr Asp
            180
                                185
Thr Thr Ile Asn Glu Ile Ile Asn Phe Val Val Ser Val Phe Val Leu
                            200
Ile Leu Pro Met Gly Val Val Phe Ile Ser Tyr Val Val Ile Ile Ser
                        215
Thr Ile Leu Lys Ile Ala Ser Ala Glu Gly Arg Lys Lys Ala Phe Ala
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Val Val Ile Ile His Tyr Gly Cys Thr
                245
                                    250
Ala Ile Ile Tyr Met Lys Pro Lys Ser Gln Ser Leu Leu Gly Gln Glu
                                265
Arg Leu Ile Ser Val Thr Tyr Thr Leu Ile Thr Pro Leu Leu Asn Pro
                            280
Leu Val Tyr Thr Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg
                        295
Ala Met Trp Gln Lys Pro Leu Ser Ser
```

<210> 1547 <211> 313

<212> PRT <213> Mus musculus

<400> 1547

Met Pro Lys Lys Asn Ser Thr Val Val Ala Glu Phe Leu Phe Glu Gly Phe Ser Ser Phe Asp Trp Gln His Arg Leu Gly Phe Phe Ile Val Phe 25 Leu Thr Leu Tyr Leu Leu Thr Leu Ser Gly Asn Met Ile Ile Val Thr Ile Ile Arg Leu Asp Arg His Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser Met Leu Ser Ile Ser Glu Thr Phe Tyr Thr Ile Ala Ile Ile Pro Arg Met Leu Ala Gly Leu Leu Asn Pro Tyr Gln Ala Ile Asp Ile Gln 90 Gly Cys Ala Thr Gln Leu Phe Phe Tyr Leu Thr Phe Gly Ile Asn Asn 105 Cys Phe Leu Leu Thr Ala Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys 120 Asn Pro Leu Arg Tyr Ser Val Ile Met Gly Lys Lys Ala Cys Ile Leu 135 Leu Ala Ser Gly Ser Leu Gly Ile Gly Leu Ser Met Ala Ile Val Gln 155 150 Val Thr Ser Val Phe Gly Leu Pro Phe Cys Asp Gly Phe Val Ile Ala 170 175 His Phe Phe Cys Asp Val Arg Pro Leu Leu Lys Leu Ala Cys Thr Asp 185 190 Thr Thr Ile Asn Glu Ile Ile Asn Phe Ile Val Ser Val Cys Val Leu

```
200
                                                 205
Val Leu Pro Met Gly Leu Val Phe Ile Ser Tyr Val Val Ile Ile Ser
                        215
                                            220
Thr Ile Leu Lys Ile Ala Ser Ala Glu Gly Arg Lys Lys Ala Phe Ala
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Val Val Ile Ile His Tyr Gly Cys Ala
                                    250
                                                         255
Ser Ile Ile Tyr Leu Lys Pro Lys Ser Gln Thr Ser Leu Gly Gln Asp
                                265
                                                    270
Arg Leu Ile Ser Val Thr Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro
                            280
                                                 285
Val Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Leu Arg Lys
                        295
                                            300
Ala Ile Gly Arg Arg Pro Leu Ser Ser
                    310
<210> 1548
<211> 315
<212> PRT
<213> Mus musculus
<400> 1548
Met Asp Leu Thr Thr Trp Met Asn Asn Tyr Thr Thr Gln Ser Asp Phe
                                    10
Thr Leu Val Gly Phe Phe Ser Gln Ser Lys His Ser Ala Leu Leu Ala
            20
                                25
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Gly Asn Ala Leu
                            40
Leu Ile Leu Leu Val Leu Ser Asp Thr His Leu His Thr Pro Met Tyr
                        55
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Met Tyr Ile Ser Val
                    70
                                        75
Thr Val Pro Lys Met Leu Met Asp Gln Val Leu Gly Ser His Lys Ile
                                    90
                                                         95
Ser Ala Ala Cys Gly Met Gln Met Phe Leu Tyr Val Thr Leu Ala
                                105
Gly Ser Glu Phe Phe Leu Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val
                            120
                                                 125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn Tyr Arg Val
                        135
Cys Leu Leu Met Ser Val Cys Trp Ile Leu Gly Ser Leu Asp Gly
                    150
                                        155
Phe Met Phe Thr Pro Val Thr Met Thr Phe Pro Phe Cys Gly Ser Arg
                                    170
Glu Ile His His Phe Phe Cys Glu Val Pro Ala Val Thr Lys Leu Ser
            180
                                185
                                                     190
Cys Ser Asp Thr Trp Leu Tyr Glu Thr Leu Met Tyr Val Cys Cys Val
        195
                            200
Leu Met Leu Leu Ile Pro Val Thr Val Ile Ser Gly Ser Tyr Thr Ser
                        215
                                            220
Ile Leu Leu Thr Val Leu Arg Met Asn Ser Ala Glu Gly Arg Lys Lys
                    230
                                        235
                                                             240
Ala Leu Ala Thr Cys Ser Ser His Met Thr Val Val Thr Leu Phe Tyr
                245
                                    250
Gly Ala Ala Ile Tyr Thr Tyr Ile Phe Pro Ala Ser Leu His Thr Pro
            260
                                265
                                                    270
Glu Lys Asp Met Val Val Ser Val Phe Tyr Thr Ile Leu Thr Pro Leu
        275
                            280
                                                285
```

```
Met Lys Lys Leu Leu Val Val Ser Thr Leu Phe
                    310
<210> 1549
<211> 315
<212> PRT
<213> Mus musculus
<400> 1549
Met Gly Ser Glu His Trp Asn Tyr Ser Thr Ala Gly Phe Val Leu Thr
                                    10
Ser Leu Phe Asn Asn Ser Gln Thr His Leu Phe Leu Phe Ser Met Val
                                25
Met Leu Val Tyr Ile Leu Ala Met Ala Gly Asn Thr Ala Met Val Leu
Leu Ile Trp Met Asp Thr Arg Leu His Thr Pro Met Tyr Phe Leu Leu
                        55
Ser Gln Leu Ser Phe Leu Asp Ile Phe Phe Thr Ser Val Thr Val Pro
                    70
                                        75
Lys Met Ile Val Gly Phe Leu Phe Gly Trp Thr Ser Ile Ser Phe Gly
                85
                                    90
Gly Cys Gly Ala Gln Met Phe Phe Phe Met Phe Leu Gly Ala Ala Glu
            100
                                105
Cys Leu Leu Leu Ala Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
                                                125
Asn Pro Leu Arg Tyr Pro Val Leu Met Ser Arg Arg Val Cys Leu Leu
                        135
                                            140
Met Val Val Ala Ser Trp Leu Gly Gly Ser Leu Asn Ala Ser Ile Gln
                    150
                                        155
Thr Ser Leu Thr Leu Gln Phe Pro Tyr Cys Gly Ser Arg Lys Ile Ser
                                    170
His Phe Phe Cys Glu Val Pro Ser Leu Leu Met Leu Ala Cys Ala Asp
            180
                                185
                                                    190
Thr Glu Ala Tyr Lys Gln Val Leu Phe Val Thr Gly Val Val Leu
                            200
                                                205
Leu Val Pro Ile Thr Phe Ile Thr Ala Ser Tyr Ala Leu Ile Leu Ala
                        215
                                            220
Ala Val Leu Arg Met His Ser Val Glu Gly Arg Gln Lys Ala Leu Ala
                    230
                                        235
Thr Cys Ser Ser His Leu Thr Val Val Asn Leu Phe Tyr Gly Pro Leu
                245
                                    250
Val Tyr Thr Tyr Met Leu Pro Ala Ser Tyr His Ser Pro Gly Gln Asp
            260
                                265
                                                    270
Asp Val Val Ser Val Phe Tyr Thr Val Leu Thr Pro Met Leu Asn Pro
                            280
Val Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Met Lys Lys
                        295
                                         300
Ala Met Arg Arg Cys Gly Val Asn Arg Asn Ala
                    310
<210> 1550
<211> 317
<212> PRT
<213> Mus musculus
```

Leu Asn Pro Leu Ile Tyr Ser Phe Arg Asn Lys Asn Val Thr Glu Ala

```
Met Ala Trp Ala Gly Asn Gln Thr Leu Ile Ser His Phe Val Leu Leu
                                     10
Gly Leu Phe Thr His Ser Pro Leu His Leu Phe Leu Phe Ser Ile Ile
            20
                                 25
Met Val Met Phe Leu Val Ala Leu Ser Gly Asn Gly Leu Met Ile Leu
                             40
Leu Ile Leu Met Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser Trp Leu Ser Leu Met Asp Leu Met Leu Ile Ser Thr Ile Val Pro
                    70
Arg Met Ala Ala Asp Phe Leu Leu Gly Arg Gly Ser Ile Ser Phe Ala
                                     90
Gly Cys Gly Leu Gln Ile Leu Phe Phe Leu Thr Leu Leu Gly Asp Glu
            100
                                 105
                                                     110
Cys Phe Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser
                            120
Asn Pro Leu Arg Tyr Ser Val Ile Met Ser Arg Arg Val Cys Trp Leu
                        135
Met Val Ala Gly Ser Trp Leu Phe Gly Leu Val Asp Gly Leu Ile Gln
                    150
Ala Val Phe Thr Leu Arg Phe Pro Tyr Cys Gly Ser Gln Glu Ile Asp
                                     170
His Phe Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys Ala Asp
            180
                                 185
                                                     190
Thr Ser Leu Tyr Glu Thr Met Ile Tyr Val Cys Cys Val Leu Met Leu
                            200
                                                 205
Leu Leu Pro Phe Ser Val Ile Ser Ala Ser Tyr Leu Arg Ile Leu Val
                        215
Ala Val Leu Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ala
                    230
                                         235
Thr Cys Ser Ser His Met Ile Val Val Ser Leu Phe Tyr Gly Ala Ala
                245
                                     250
Met Ile Thr Tyr Met Arg Pro Gln Ala Tyr His Ser Ser Lys Gln Asp
                                                     270
            260
                                 265
Lys Val Val Ser Ala Phe Tyr Thr Met Ile Thr Pro Met Leu Asn Pro
        275
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Lys
                        295
                                             300
Leu Leu Gly Lys Cys Pro Cys Gly Gly Gly Thr Leu Gly
                    310
<210> 1551
<211> 315
<212> PRT
<213> Mus musculus
<400> 1551
Met Gly Ile Trp Leu Asn Glu Ser Ser Val Asp Gly Phe Ile Leu Leu
                                     10
Gly Ile Phe Ser Gln Ser Gln Thr Asp Leu Leu Phe Ser Thr Val
            20
                                 25
Met Leu Val Phe Thr Val Ala Leu Cys Gly Asn Val Leu Leu Ile Leu
                            40
Leu Ile Tyr Thr Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser Gln Leu Ser Leu Met Asp Leu Met Leu Val Cys Asn Ile Val Pro
```

<400> 1550

```
Lys Met Ala Val Asn Phe Leu Ser Gly Arg Lys Ser Ile Ser Phe Ala
                                    90
Gly Cys Gly Ile Gln Ile Gly Phe Phe Val Ser Leu Val Gly Ser Glu
            100
                                105
                                                    110
Gly Leu Leu Gly Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser
                            120
His Pro Leu His Tyr Pro Ile Leu Met Ser Gln Lys Val Cys Leu Gln
                        135
Ile Ala Gly Ser Ser Trp Ala Phe Gly Ile Leu Asp Gly Ile Ile Gln
                    150
                                        155
Met Val Ala Ala Met Ser Leu Pro Tyr Cys Gly Ser Arg Tyr Ile Asp
                                    170
His Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ala Cys Ala Asp
            180
                                185
                                                    190
Thr Ser Leu Phe Asp Thr Leu Leu Phe Ala Cys Cys Val Phe Met Leu
                            200
                                                 205
Leu Leu Pro Phe Ser Ile Ile Val Thr Ser Tyr Ala Arg Ile Leu Gly
                        215
                                            220
Ala Val Leu Arg Met His Ser Ala Gln Ser Arg Lys Lys Ala Leu Ala
                    230
                                        235
Thr Cys Ser Ser His Leu Thr Ala Val Ser Leu Phe Tyr Gly Ala Ala
                245
                                    250
Met Phe Ile Tyr Leu Arg Pro Arg Arg Tyr Arg Ala Pro Ser His Asp
            260
                                265
                                                    270
Lys Val Val Ser Ile Phe Tyr Thr Val Leu Thr Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Arg Glu Val Met Gly Ala Leu Arg Lys
                        295
                                            300
Gly Leu Asp Arg Cys Arg Val Gly Ser Gln His
                    310
```

```
<210> 1552
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<400> 1552

Met Pro Leu Asn Ala Gln Lys Thr Met Glu Asn Asp Ser Ser Val Ser 10 Glu Phe Ile Leu Met Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro 20 25 Leu Phe Val Leu Phe Leu Val Asn Tyr Thr Val Thr Val Met Gly Asn 40 Leu Ser Leu Met Asn Leu Ile Cys Leu Asn Ser Asn Leu His Thr Pro 55 60 Met Tyr Phe Phe Ile Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser 70 75 Met Val Phe Thr Pro Lys Met Leu Met Gly Phe Val Val Glu Lys Asn 95 8.5 90 Ile Ile Ser Phe Arg Gly Cys Met Thr Gln Leu Phe Phe Leu Phe 100 105 110 Phe Val Asn Ser Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg 120 125 Tyr Val Ala Ile Cys Gln Pro Leu Leu Tyr Lys Ala Val Met Ser Pro 135 140 Gly Ile Cys Phe Leu Leu Ile Phe Cys Thr Tyr Leu Met Gly Leu Val 155 150 Ser Ala Leu Phe His Thr Gly Phe Met Ile Arg Leu Asn Phe Cys Asp

<211> 316

<212> PRT

<213> Mus musculus

```
165
                                    170
Ser Asn Val Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Phe Arg
                                185
                                                    190
Leu Ser Cys Ser Ser Thr Tyr Leu Thr Glu Leu Val Ser Ser Ala Val
        195
                            200
                                                 205
Val Gly Thr Ala Ile Ile Leu Cys Cys Leu Ile Ile Leu Ile Ser Tyr
                        215
                                            220
Gly Met Ile Leu Tyr Asn Ile Ile His Met Ser Ser Gly Lys Gly Trp
                    230
                                        235
Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu
                245
                                    250
Phe Tyr Val Thr Gly Met Leu Ala Tyr Val Lys Pro Ser Ser Ala Glu
                                265
                                                     270
Thr Val Gly Gln Gly Lys Ile Phe Ser Val Phe Tyr Thr Phe Leu Val
        275
                            280
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                        295
                                            300
Leu Ala Val Lys Lys Thr Trp Lys Arg Leu Thr Cys
                    310
<210> 1553
<211> 316
<212> PRT
<213> Mus musculus
<400> 1553
Met Gln Val Met Lys Gln Met Ile Thr Glu Ser Asn Ser Ser Val Thr
                                    10
Glu Phe Ile Leu Met Gly Leu Thr Val Gln Lys Glu Leu Gln Leu Pro
            20
Leu Phe Val Leu Phe Leu Leu Asn Tyr Thr Ala Thr Val Val Gly Asn
                                                 45
Leu Ser Leu Met Asn Leu Ile Cys Leu Asn Ser His Leu His Thr Pro
                        55
Met Tyr Phe Phe Ile Phe Asn Leu Ser Cys Ile Asp Phe Cys Tyr Ser
                    70
                                        75
Phe Val Cys Asn Pro Thr Met Leu Thr Ser Phe Val Ser Glu Gln Asn
                                    90
Thr Ile Ser Tyr Glu Gly Cys Met Thr Gln Leu Phe Phe Phe Cys Phe
            100
                                105
                                                     110
Phe Val Asn Ser Glu Cys Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg
        115
                            120
                                                 125
Tyr Val Ala Ile Cys His Pro Leu Gln Tyr Thr Thr Val Met Ser Pro
                        135
                                            140
Lys Ile Cys Cys Leu Leu Val Phe Gly Ser Tyr Leu Met Gly Phe Ala
                                        155
                    150
Gly Ala Leu Thr His Thr Gly Phe Met Ile Arg Leu Arg Phe Cys Asn
                                    170
                                                         175
                165
Ser Asn Ile Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln
                                185
                                                     190
            180
Leu Ser Cys Thr Ser Thr Tyr Val Asn Glu Leu Val Ser Ser Ala Val
                            200
                                                 205
        195
Val Gly Thr Ile Ile Ile Leu Ser Ser Ile Ile Ile Leu Val Ser Tyr
                                            220
   210
                        215
Ala Met Ile Leu Ser Asn Ile Leu His Met Ser Ser Lys Gly Trp
                                        235
                    230
Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu
                245
                                    250
```

Phe Tyr Gly Ser Gly Leu Leu Ala Tyr Ile Lys Pro Thr Ser Ala Glu Thr Val Asp Gln Gly Lys Phe Leu Ser Ile Phe Tyr Thr Leu Val Ile 275 285 Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Val Lys Arg Thr Met Lys Arg Val Thr Ser 310 <210> 1554 <211> 311 <212> PRT <213> Mus musculus <400> 1554 Met Gly Leu Glu Asn Gly Ser Leu Val Thr Glu Phe Ile Leu Leu Gly 20 40 55 70 75

Leu Thr Asn Asp Pro Asp Leu Gln Leu Pro Leu Phe Leu Phe Leu Leu Ile Tyr Thr Thr Ala Val Gly Asn Leu Ala Leu Ile Thr Leu Ile Ala Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu Asn Leu Ser Cys Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys Met Leu Met Asn Phe Leu Val Arg Lys Asn Ile Ile Ser Tyr Met Gly 90 Cys Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Ala Ile Cys Glu Cys 100 105 110 Cys Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Asn Ile Thr Met Ser Pro Lys Val Cys Ser Tyr Leu 135 140 Met Leu Gly Ser Tyr Ile Met Gly Phe Ser Gly Ala Met Ile His Thr 150 155 Gly Cys Ile Leu Arg Leu Thr Phe Cys Asp Arg Asn Ile Ile Asn His 165 170 Tyr Phe Cys Asp Leu Phe Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr 180 185 190 Tyr Ala Asn Glu Ile Glu Ile Leu Ile Val Gly Gly Lys Asp Ile Ile 195 ⁻ 200 205 Val Pro Ser Val Ile Ile Phe Thr Ser Tyr Gly Phe Ile Leu Ser Asn 215 220 Ile Leu Gln Met Arg Ser Thr Ala Gly Met Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Ile Leu Ala Val Ser Leu Phe Phe Gly Ser Cys Ala 245 250 Phe Met Tyr Leu Gln Pro Ser Ser Pro Gly Ser Met Asp Gln Gly Lys 260 265 Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu 280 285 Ile Tyr Ser Phe Arg Asn Lys Asp Val Lys Ile Ala Leu Arg Lys Ile 295

Phe Gly Gln Arg Arg Phe Ser

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1555
Met Gly Val Glu Asn Gly Ser Leu Val Thr Glu Phe Ile Leu Gln Gly
1
Leu Thr Ser Asp Pro Asp Leu Gln Leu Pro Leu Phe Leu Phe Leu
            20
Leu Ile Tyr Thr Thr Ala Leu Gly Asn Leu Ser Leu Ile Thr Leu
        35
                            40
Ile Ala Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu
                        55
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys
                                                             80
                    70
                                        75
Met Leu Met Asn Phe Leu Val Arg Lys Asn Phe Ile Ser Tyr Val Gly
                85
                                    90
Cys Met Thr Gln Leu Tyr Leu Phe Val Phe Phe Ala Val Ser Glu Cys
            100
                                105
Cys Val Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
        115
Pro Leu Leu Tyr Asn Ile Ala Met Ser Pro Lys Val Cys Ser Tyr Leu
                        135
                                            140
Met Leu Gly Ser Tyr Ile Met Gly Phe Ser Gly Ala Met Ile His Thr
                    150
                                        155
Gly Trp Met Leu Arg Leu Thr Phe Cys Asp Arg Ser Ile Ile Asn His
                                    170
                165
Tyr Phe Cys Asp Leu Leu Pro Leu Leu Gln Leu Ser Cys Thr Asn Thr
                                                    190
            180
                                185
Tyr Ala Asn Glu Ile Glu Ile Ile Ile Val Gly Gly Ile Asp Ile Ile
                            200
        195
Val Pro Ser Ile Ile Ile Phe Thr Ser Tyr Gly Phe Val Leu Ser Asn
                        215
                                            220
Ile Phe Gln Met Arg Ser Thr Asp Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Val Val Ser Leu Phe Phe Gly Ser Gly Ala
                                    250
                245
Phe Met Tyr Leu Gln Pro Ser Ser Pro Glu Ser Met Asp Gln Gly Lys
                                265
            260
Arg Ser Ser Val Phe Tyr Thr Ile Leu Val Pro Met Met Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Lys Lys Thr
                        295
Phe Ser Thr Gln Ser Val
<210> 1556
<211> 316
<212> PRT
<213> Mus musculus
<400> 1556
Met Arg Val Met Lys Gln Met Val Ser Glu Ser Asn Tyr Ser Val Thr
                                    10
Glu Phe Ile Phe Met Gly Leu Thr Val Gln Arg Glu Phe Gln Leu Pro
            20
                                25
Leu Phe Val Leu Phe Leu Leu Asn Tyr Thr Ala Thr Val Val Gly Asn
```

```
Leu Ser Leu Met Asn Leu Ile Cys Leu Asn Ser His Leu His Thr Pro
Met Tyr Phe Phe Ile Phe Asn Leu Ser Cys Ile Asp Phe Cys Tyr Ser
                    70
Leu Val Cys Asn Pro Thr Met Leu Thr Ser Phe Val Ser Glu His Asn
                                    90
Thr Ile Ser Tyr Ala Gly Cys Met Ser Gln Leu Phe Leu Phe Cys Phe
            100
                                105
Phe Ala Asn Ser Glu Cys Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg
                            120
Tyr Val Ala Ile Cys His Pro Leu Lys Tyr Thr Thr Val Met Ser Pro
                        135
Lys Ile Cys Ser Leu Leu Val Phe Gly Ser Tyr Leu Met Gly Phe Ala
                    150
                                        155
Gly Ala Met Thr His Thr Gly Phe Met Ile Arg Leu Ser Phe Cys Asn
                165
                                    170
Ser Asn Ile Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln
            180
                                185
Leu Ser Cys Thr Ser Thr Tyr Val Asn Glu Leu Val Ser Ser Ala Val
        195
                            200
Val Gly Thr Ile Ile Ile Leu Ser Ser Leu Ile Ile Leu Val Ser Tyr
    210
                        215
Ala Met Ile Leu Ser Asn Ile Leu His Met Ser Ser Lys Gly Trp
                    230
                                        235
Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu
                245
                                    250
Phe Tyr Gly Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala Glu
                                265
Thr Val Gly Gln Gly Lys Ile Phe Ser Val Phe Tyr Thr Leu Val Val
                            280
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
Phe Ala Val Lys Arg Thr Met Lys Arg Val Thr Ser
                    310
```

```
<210> 1557
```

<400> 1557

Met Lys Gln Met Ala Thr Lys Asn Asp Ser Ser Val Ser Glu Phe Ile Leu Met Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro Leu Phe Phe 25 Leu Phe Leu Leu Asn His Thr Val Ile Val Val Gly Asn Leu Ser Leu 40 Met Ser Leu Ile Ile Leu Asn Ser Asn Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Phe Val Phe 70 Thr Pro Lys Met Leu Met Ser Phe Val Ser Glu Lys Asn Ile Ile Pro 85 90 Phe Thr Gly Cys Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Ala His 100 105 Ser Glu Ser Trp Val Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala 120 Ile Cys Lys Pro Leu Leu Tyr Lys Ala Ile Met Leu Pro Arg Ile Cys

<211> 313

<212> PRT

<213> Mus musculus

```
130
                        135
Cys Leu Leu Met Phe Val Ser Tyr Leu Ile Gly Phe Ala Ser Ala Met
                    150
                                        155
Val Leu Ala Gly Leu Met Ile Arg Leu Asn Phe Cys Asn Asn Asn Ile
                                    170
Ile Asn His Tyr Met Cys Asp Ile Phe Pro Val Leu Arg Ile Ser Cys
                                185
Ser Asn Thr Tyr Leu Asn Glu Leu Val Ser Thr Ala Val Val Gly Thr
                            200
Ala Ile Ile Leu Cys Ser Leu Ile Ile Phe Ile Ser Tyr Ala Met Ile
                        215
                                            220
Leu Phe Asn Ile Ile His Met Ser Ser Gly Lys Gly Trp Ser Lys Ala
                    230
                                        235
Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Phe Phe Tyr Gly
                                    250
Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala Glu Thr Val Gly
                                265
Gln Gly Lys Phe Phe Ser Val Phe Tyr Thr Phe Leu Val Pro Met Leu
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Val
                        295
Lys Lys Thr Ile Lys Arg Ile Thr Ser
                    310
<210> 1558
<211> 317
<212> PRT
<213> Mus musculus
<400> 1558
Met Ile Ser Met Leu Ala Gly Asn Gly Ser Ser Val Thr Glu Phe Val
                                    10
Leu Ala Gly Leu Thr Asp Arg Pro Glu Leu Gln Leu Pro Leu Phe Tyr
                                25
Leu Phe Leu Ile Ile Tyr Ile Ile Thr Val Val Gly Asn Leu Gly Leu
                            40
Ile Ile Leu Ile Gly Leu Asn Pro His Leu His Thr Pro Met Tyr Tyr
                        55
Phe Leu Phe Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Phe
                    70
                                        75
Ser Pro Lys Met Leu Ile Asn Phe Val Ser Glu Lys Asn Ser Ile Ser
                                    90
Tyr Ala Gly Cys Met Thr Gln Leu Phe Leu Phe Leu Phe Phe Val Ile
            100
                                105
Ser Glu Cys Tyr Met Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala
        115
                            120
                                                125
Ile Cys Asn Pro Leu Leu Tyr Lys Val Thr Met Ser Pro Gln Ile Cys
                        135
                                            140
Ser Val Ile Ser Phe Ala Ala Tyr Gly Met Gly Phe Ala Gly Ser Ser
                    150
                                        155
Ala His Thr Gly Cys Met Leu Arg Leu Thr Phe Cys Asn Val Asn Val
                                    170
Ile Asn His Tyr Leu Cys Asp Ile Leu Pro Leu Leu Gln Leu Ser Cys
                                185
                                                    190
Thr Ser Thr Tyr Val Asn Glu Val Val Leu Ile Val Val Gly Ile
                            200
```

Asn Ile Thr Val Pro Ser Phe Thr Ile Leu Ile Ser Tyr Val Phe Ile

```
Leu Ala Asn Ile Leu Asn Ile Lys Ser Thr Gln Gly Arg Ala Lys Ala
                    230
Phe Ser Thr Cys Ser Ser His Ile Met Ala Ile Ser Leu Phe Phe Gly
                245
                                    250
Ser Ala Ala Phe Met Tyr Leu Lys Tyr Ser Ser Gly Ser Met Glu Gln
                                265
Gly Lys Ile Ser Ser Val Phe Tyr Thr Asn Val Gly Pro Met Leu Asn
                            280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg
                        295
                                            300
Lys Ser Leu Ile Lys Phe Arg Glu Lys Thr Asp Phe Asn
<210> 1559
<211> 313
<212> PRT
<213> Mus musculus
<400> 1559
Met Met Gln Met Thr Met Glu Asn Lys Ser Ser Val Ser Glu Phe Ile
Leu Met Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro Leu Phe Val
Leu Phe Leu Met Asn Tyr Thr Ala Thr Val Met Gly Asn Leu Ser Leu
Met Asn Leu Ile Cys Leu Asn Ser Asn Leu His Thr Pro Met Tyr Phe
Phe Ile Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Met Val Phe
                                        75
Thr Pro Lys Met Leu Met Ser Phe Val Val Glu Lys Asn Thr Ile Ser
Phe Arg Gly Cys Met Thr Gln Leu Phe Phe Phe Cys Val Phe Ile Asn
            100
                                105
                                                    110
Ala Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                125
Ile Gly Gln Pro Leu Met Tyr Gln Val Val Met Ser Pro Lys Ile Cys
                        135
                                            140
Cys Leu Leu Ile Phe Gly Ser Tyr Leu Met Gly Phe Ile Ser Ala Thr
                    150
                                        155
Ala His Thr Gly Cys Met Val Arg Leu Arg Phe Cys Asp Ser Asn Ile
                165
                                    170
Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln Leu Ser Cys
                                185
                                                    190
Ser Ser Thr Tyr Val Asn Glu Leu Met Ser Tyr Ile Ala Val Gly Thr
```

200 205 Ala Ile Ile Leu Cys Ser Leu Ile Ile Leu Val Ser Tyr Ala Met Ile 215 220 Leu Phe Asn Ile Ile His Ile Ser Ser Gly Lys Gly Trp Ser Lys Ala 235 Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly 250 Ser Gly Leu Leu Ala Tyr Val Asn Pro Ser Ser Ala Glu Thr Val Gly Gln Ala Lys Phe Phe Ser Val Phe Tyr Thr Leu Leu Val Pro Met Leu 280 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Met 295 300 Lys Lys Ser Trp Lys Arg Ile Thr Ser

305 310

<210> 1560

```
<211> 314
<212> PRT
<213> Mus musculus
<400> 1560
Met Arg Arg Leu Asn Thr Thr Pro His His Thr Asn Gly Phe Ile Leu
Val Gly Phe Ser Glu Trp Pro Arg Leu Glu Met Ala Leu Leu Val Val
                                25
Ile Ser Ile Phe Tyr Ile Leu Thr Leu Leu Gly Asn Ser Ala Ile Ile
                            40
Ile Leu Ser Arg Leu Asp Pro Lys Leu His Thr Pro Met Tyr Phe Phe
                        55
Leu Ala Asn Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val
                                         75
Pro Gln Met Leu Lys Asn Ile Gln Ser His Glu Arg Ser Ile Thr Tyr
                8.5
                                     90
Val Gly Cys Ile Ala Gln Leu Phe Ile Phe Leu Ser Leu Gly Ser Thr
                                105
                                                     110
Glu Cys Val Leu Leu Ser Val Met Ala Phe Asp Arg Tyr Val Ala Ile
        115
                            120
                                                 125
Cys Gln Pro Leu Arg Tyr Thr Val Ile Met His Pro Gln Leu Cys Gln
                        135
                                             140
Gln Leu Ala Ala Val Ala Trp Ile Thr Gly Phe Ser Asn Ser Leu Val
                                         155
                    150
Gln Thr Val Leu Thr Ser Leu Leu Pro Arg Cys Gly Gln Tyr Gln Ile
                                    170
                165
Glu Asn Phe Phe Cys Glu Val Pro Ala Met Leu Gln Leu Ser Cys Val
            180
                                185
                                                     190
Asp Thr Trp Val Asn Glu Val Glu Met Tyr Ala Ala Val Val Ile
        195
                            200
Lys Val Ile Pro Leu Gly Leu Ile Leu Phe Ser Tyr Ile Asn Ile Val
                        215
                                             220
Arg Ala Val Ile Lys Ile Gln Ser Ser Glu Gly Arg Lys Lys Ala Phe
                    230
                                         235
Asn Thr Cys Gly Ser His Leu Leu Val Val Ile Met Phe Tyr Gly Ser
                245
                                     250
                                                         255
Ala Ile Ser Gly Tyr Ala Tyr Met Ala Pro Lys Ser Ser Ser Ala Lys
                                265
Leu Lys Gly Lys Leu Leu Ala Leu Phe Tyr Gly Leu Ile Thr Pro Met
                            280
Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Ala Ala
                        295
Val Lys Lys Val Leu Gly Arg Glu Gln Glu
                    310
<210> 1561
<211> 313
<212> PRT
<213> Mus musculus
<400> 1561
Met Gly Gln Gln Asn Thr Thr Ser Leu Pro Gly Phe Ile Leu Met Gly
                                    10
```

```
Ile Thr Gln Ser Thr Glu Leu Gln Leu Pro Leu Phe Gly Val Phe Phe
Ile Ile Tyr Ala Val Thr Val Met Gly Asn Leu Gly Met Ile Ile Leu
                            40
Thr Lys Leu Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Ile Arg
His Leu Ala Phe Ile Asp Leu Gly Asn Ser Thr Val Ile Cys Pro Lys
                    70
Met Leu Met Asp Phe Val Met Asp Glu Lys Asn Ile Ser Phe Tyr Ala
Cys Ala Thr Gln Met Ser Phe Phe Val Leu Phe Ile Ile Ser Glu Leu
Phe Ile Leu Ser Ser Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Ser Val Ile Met Ser Gln Arg Leu Cys His Val Leu
                        135
Val Asp Ile Pro Tyr Leu Tyr Ser Thr Phe Gln Ala Leu Leu Phe Thr
                    150
                                        155
Ser Lys Ile Phe Thr Leu Thr Phe Cys Gly Ser Asn Ile Ile Ser His
                                    170
                165
Phe Tyr Cys Asp Ala Val Tyr Leu Leu Pro Thr Leu Cys Ser Asn Ala
           180
                                185
Glu Glu Ile Gln Leu Leu Ile Ile Leu Phe Ser Ala Leu Asn Leu Leu
        195
                            200
Ser Ser Leu Leu Ile Val Leu Gly Leu Tyr Val Leu Ile Leu Ile Ala
                        215
                                            220
Ile Cys Arg Met His Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Val Phe Tyr Gly Thr Leu Leu
                245
                                    250
Phe Met Tyr Leu Gln Pro Lys Ser Thr Asp Ser Leu Glu Asn Asp Lys
                                265
            260
Ile Thr Ser Val Phe Tyr Thr Leu Val Ile Pro Met Ile Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Asn Arg Ala
                    295
Leu Lys Asn Pro Phe Lys Ile Asn Thr
```

```
<210> 1562
<211> 309
```

<212> PRT <213> Mus musculus

<400> 1562

 Met
 Lys
 His
 Ser
 Asn
 Asp
 Ser
 Lys
 Val
 Thr
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly

 Phe
 Ala
 Gly
 Glu
 Ser
 Trp
 His
 Ile
 Leu
 Phe
 Val
 Val
 Phe
 Val
 Phe
 Leu
 Phe
 Leu
 Leu
 Leu
 Asn
 Ile
 Gly
 Met
 Ile
 Leu
 Leu
 Leu
 Asn
 Ile
 Gly
 Met
 Ile
 Leu
 Leu
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe
 Phe
 Phe
 Leu
 Gln
 Ser
 Ser
 Leu
 His
 Tyr
 Phe
 Phe
 Phe
 Leu
 Gln
 Ser
 Ser
 Leu
 Cys
 Tyr
 Ser
 Ser
 Ala
 Ile
 Thr
 Phe
 Phe
 Phe
 Arg
 Arg
 Leu
 Cys
 Tyr
 Ser
 Ser
 Ile
 Ser
 Phe
 Thr

```
100
                                105
Phe Ile Leu Ala Ala Met Ala Val Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                 125
Pro Leu Arg Tyr Pro Ile Ile Met Ser Gln Arg Leu Cys Ile Leu Leu
                        135
                                            140
Leu Leu Gly Ser Tyr Thr Met Gly Phe Leu Asn Ala Thr Val Asn Thr
                    150
Gly Phe Thr Phe Leu Ser Asn Phe Cys Lys Ser Asn Val Ile Asn His
                165
                                    170
Phe Phe Cys Asp Val Pro Pro Ile Leu Ala Leu Ser Cys Ser Ser Ile
            180
                                185
Asp Leu Asn Ile Met Val Leu Thr Ile Phe Val Gly Phe Asn Leu Thr
                            200
                                                 205
Phe Thr Val Ser Val Val Ile Leu Ser Tyr Thr Phe Ile Leu Ala Ala
                        215
                                             220
Ile Leu Arg Met Ser Ser Ala Ser Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ala Ser His Met Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ser
                                     250
Tyr Met Tyr Val Leu His Gly Thr Asn Arg Ser Gln Glu Gln Glu Lys
                                265
Val Ala Ser Val Phe Tyr Gly Ile Met Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Gln Asp Val Ile Glu Ala Leu Arg His Ile
    290
                        295
                                             300
Gly Asn Lys Cys Phe
305
<210> 1563
<211> 311
<212> PRT
<213> Mus musculus
<400> 1563
Met Arg Asn His Thr Val Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp
Asp Gln Gln Leu Gln Val Leu Ile Phe Ile Ile Leu Phe Phe Thr Tyr
Ser Leu Ser Ile Ser Gly Asn Leu Ala Ile Ile Ser Leu Ile Leu Val
Asp Pro His Leu Lys Thr Ala Met Tyr Tyr Phe Leu Lys Asn Phe Ala
Val Leu Glu Ile Ser Phe Thr Ser Ala Ser Ile Pro Arg Tyr Leu Tyr
                                         75
Asn Ile Ala Thr Gly Asp Lys Met Ile Thr Tyr Asn Ala Cys Val Ala
Gln Val Phe Phe Thr Asp Leu Phe Gly Val Thr Glu Phe Phe Leu Leu
                                105
Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His
                            120
                                                 125
Tyr Leu Thr Ile Met Ser Thr Thr Val Cys Arg Arg Leu Val Phe Cys
                        135
                                            140
Ser Trp Val Ala Gly Leu Phe Ile Leu Ile Pro Pro Leu Ser Leu Gly
```

Leu Asn Leu Gln Phe Cys Asp Ser Asn Ile Ile Asp His Phe Ile Cys

Asp Ala Ser Pro Leu Leu Lys Ile Ser Cys Ser Asp Thr Trp Phe Met

155

190

170

```
Glu Gln Thr Val Leu Ile Cys Ala Val Leu Thr Leu Ile Ile Thr Leu
                            200
Val Cys Val Val Leu Ser Tyr Val Asn Ile Ile Lys Thr Val Leu Arg
   210
                        215
                                           220
Phe Pro Ser Ala Gln Gln Lys Lys Ala Phe Ser Thr Cys Ser Ser
                    230
                                        235
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
               245
                                    250
Ile Lys Pro Ser Ala Lys Asp Glu Val Ala Ile Asn Lys Gly Val Thr
                                265
           260
Val Leu Thr Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr
                           280
                                                285
Leu Arg Asn Arg Gln Val Lys Gln Ala Phe Trp Asp Ser Ile Lys Arg
                       295
Ile Ile Ala Phe Ser Lys Gln
```

<210> 1564 <211> 312

<212> PRT

<213> Mus musculus

<400> 1564

Met Lys Asn Tyr Thr Ala Ile Thr Thr Phe Ile Leu Val Gly Leu Thr - 5 10 Asn Asp Ala Asn Leu Gln Ile Leu Leu Phe Ile Phe Leu Leu Thr 2.0 25 Tyr Leu Leu Ser Val Ile Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 40 Val Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Leu Leu Glu Val Ser Phe Thr Thr Val Cys Ile Pro Arg Phe Leu 70 75 Tyr Thr Met Ala Ser Gly Asp Asn Thr Ile Thr Tyr Asn Ala Cys Ala 85 90 Thr Gln Leu Phe Phe Val Ile Val Leu Gly Val Thr Glu Phe Phe Leu 100 105 Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 115 125 His Tyr Thr Ile Met Ser Asn Arg Val Cys Ile Gln Phe Leu Ile 130 135 140 Gly Cys Tyr Leu Met Ala Leu Ile Ile Val Ile Pro Pro Tyr Ser Ile 150 155 Ser Phe Lys Leu Glu Phe Cys Asn Ser Asn Val Ile Asp His Phe Gly 170 175 165 Cys Asp Ala Ala Pro Ile Leu Lys Ile Ser Cys Ser Asn Thr Glu Phe 180 185 190 Ile Glu Arg Phe Val Leu Ile Leu Ala Val Leu Thr Leu Met Phe Thr 195 200 205 Leu Leu Cys Val Val Met Ser Tyr Thr Tyr Ile Ile Arg Thr Ile Leu 210 215 220 Arg Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser 235 230 Ser His Ile Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile 250 Tyr Ile Lys Pro Ser Ala Lys Glu Gly Val Ala Val Asn Lys Val Val 265 Ser Val Leu Thr Thr Ser Val Ala Pro Val Met Asn Pro Phe Ile Tyr

```
275
                            280
Thr Leu Arg Asn Lys Gln Val Val Gln Ala Phe Lys Asp Met Ile Lys
                        295
                                            300
Arg Ile Ala Ser Ile Ile Lys Ser
                    310
<210> 1565
<211> 311
<212> PRT
<213> Mus musculus
<400> 1565
Met Arg Asn His Thr Val Thr Thr Phe Ile Leu Leu Gly Leu Thr Glu
Asp Pro Gln Ile Gln Ser Leu Leu Leu Ile Phe Leu Leu Leu Thr Tyr
Leu Leu Asn Ile Thr Gly Asn Leu Thr Ile Ile Leu Leu Thr Leu Ile
Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe Ser
                        5.5
Phe Leu Glu Ile Leu Phe Thr Ser Ala Cys Ile Pro Arg Tyr Leu Tyr
                                                             80
Asn Leu Ala Thr Gly Asp Lys Thr Ile Thr Tyr Gly Ala Cys Ala Ser
Gln Ala Phe Phe Thr Asp Leu Phe Gly Val Thr Glu Phe Phe Leu Leu
            100
                                105
Ala Thr Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
                                                 125
Tyr Thr Thr Ile Met Ser Thr Ala Cys Arg Arg Leu Leu Cys Cys
                        135
                                            140
Trp Val Ala Gly Val Ile Ile Ile Leu Pro Pro Phe Ser Leu Ser Gln
                    150
                                        155
Asn Leu Gln Phe Cys Asp Ser Asn Ile Ile Asp Ser Phe Leu Cys Asp
                165
                                    170
                                                         175
Val Ser Pro Phe Leu Lys Ile Ser Cys Ser Asp Thr Trp Val Ile Glu
                                185
                                                     190
Gln Met Val Ile Gly Cys Ala Val Leu Thr Phe Ile Thr Thr Leu Phe
        195
                            200
Cys Val Val Leu Ser Tyr Val Tyr Ile Ile Lys Thr Ile Leu Lys Phe
                        215
                                             220
Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His
                    230
Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr Val
                                    250
Lys Pro Ser Ala Lys Asp Ser Val Ala Ile Asn Lys Gly Val Ile Val
                                265
Leu Thr Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr Leu
                            280
Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Asp Ser Ile Lys Lys Ile
                        295
                                             300
Ala Leu Glu Cys Gln Asn Gly
<210> 1566
<211> 309
<212> PRT
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<213> Mus musculus

```
<400> 1566
Met Gly Asp Asp Asn Asp Thr Asp Ile Thr Glu Phe Ile Leu Leu Gly
Phe Ser Gly Tyr Gly Phe Leu Gln Gly His Leu Phe Trp Gly Val Leu
                                25
                                                     30
Cys Ile Tyr Val Val Thr Leu Leu Gly Asn Ser Leu Ile Val Leu Leu
                            40
Thr Leu Ala Asp Ser Ala Leu His Ser Pro Met Tyr Phe Phe Leu Arg
                                            60
His Phe Ser Val Val Glu Ile Leu Tyr Thr Thr Thr Ile Val Pro Arg
                    70
                                         75
Met Leu Ala Asp Leu Arg Ser Ser Cys Pro Thr Ile Pro Leu Ala Ser
                                    90
Cys Phe Thr Gln Leu Tyr Phe Phe Ala Leu Phe Gly Ile Ala Glu Cys
            100
                                105
Cys Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Cys
                            120
Pro Leu His Tyr Thr Thr Leu Met Ser Gln Gly Thr Tyr Thr Gly Leu
                        135
                                            140
Val Gly Ala Ser Tyr Leu Ala Gly Val Ile Ser Gly Thr Thr His Ser
                    150
                                        155
Ile Phe Ile Phe Thr Leu Pro Phe Arg Gly Ala Lys Thr Ile His His
                165
                                    170
                                                         175
Phe Leu Cys Asp Ile Leu Pro Val Leu Arg Leu Ala Thr Ala Ser Thr
                                185
                                                     190
            180
Phe Trp Gly Glu Val Gly Asn Leu Phe Val Thr Ile Thr Phe Ile Phe
                            200
                                                 205
Ala Pro Phe Leu Leu Ile Val Ala Ser Tyr Ala Cys Ile Leu Ala Thr
                                             220
Ile Leu Gly Val Ala Thr Ser Gln Gly Arg Gln Lys Leu Phe Ser Thr
                                         235
                    230
Cys Ser Ser His Leu Phe Val Val Ile Leu Phe Phe Gly Thr Gly Thr
                                     250
                                                         255
Val Ala Tyr Met Arg Pro Gln Ala Asp Ser Phe Gly Asp Thr Asp Gln
                                265
Ile Ile Thr Leu Phe Tyr Thr Val Val Thr Pro Met Cys Asn Pro Phe
        275
                            280
                                                 285
Val Tyr Thr Leu Arg Asn Lys Glu Val Thr Gly Ala Met Arg Arg Leu
    290
                        295
                                             300
Val Lys Arg Tyr Phe
305
```

```
<210> 1567
<211> 312
<212> PRT
<213> Mus musculus
```

<400> 1567

 Met Gly Asp Asp Asp Asp Asp Thr Asp Ile Thr Glu Phe Ile Leu Leu Gly 1
 5
 10
 15

 Phe Ser Gly Tyr Gly Phe Leu Gln Gly His Leu Phe Trp Gly Val Leu 20
 25
 30

 Cys Ile Tyr Val Val Thr Leu Leu Gly Asn Ser Leu Ile Val Leu Leu 35
 40
 45

 Thr Leu Ala Asp Ser Ala Leu His Ser Pro Met Tyr Phe Phe Leu Arg 50
 55
 60

 His Phe Ser Val Val Glu Ile Leu Tyr Thr Thr Thr Ile Val Pro Arg

```
70
Met Leu Ala Asp Leu Arg Ser Ser Cys Pro Thr Ile Pro Leu Ala Ser
                25
                                    90
Cys Phe Thr Gln Leu Tyr Phe Phe Ala Leu Phe Gly Ile Ala Glu Cys
            100
                                105
                                                    110
Cys Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Cys
                            120
                                                125
Pro Leu His Tyr Thr Thr Leu Met Ser Gln Gly Thr Tyr Thr Gly Leu
                        135
                                            140
Val Gly Ala Ser Tyr Leu Ala Gly Val Ile Ser Gly Thr Thr His Ser
                    150
                                        155
Ile Phe Ile Phe Thr Leu Pro Phe Arq Gly Ala Lys Thr Ile His His
                                    170
Phe Leu Cys Asp Ile Leu Pro Val Leu Arg Leu Ala Thr Ala Ser Thr
            180
                                185
                                                    190
Phe Trp Gly Glu Val Gly Asn Leu Phe Val Thr Ile Thr Phe Ile Phe
       195
                            200
                                                205
Val Pro Phe Leu Leu Ile Val Ala Ser Tyr Ala Cys Ile Leu Val Thr
                        215
                                            220
Ile Leu Gly Val Ala Thr Ser Gln Gly Arg Gln Lys Leu Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Phe Val Val Ile Leu Phe Phe Gly Thr Ala Thr
                                    250
Val Ala Tyr Met Arg Pro Gln Ala Asp Ser Phe Gly Asn Thr Asp Gln
                                265
Ile Leu Thr Leu Val Tyr Thr Val Val Thr Pro Met Cys Asn Pro Phe
                            280
                                                285
Val Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Met Arg Arg Leu
                        295
Met Lys Arg Tyr Leu Trp Gly Pro
                    310
<210> 1568
<211> 313
<212> PRT
<213> Mus musculus
<400> 1568
Met Gly Gly Thr Asn Gln Ser Ser Val Ser Glu Phe Leu Leu Gly
                                    10
Leu Ser Arg Gln Pro Gln Gln Gln Gln Leu Ile Phe Leu Leu Phe
Leu Ile Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Ile Ile Leu
Ala Ile Ser Thr Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Thr Thr Val Pro
                    70
                                        75
Lys Val Leu Ala Ile His Ile Leu Arg Asn Gln Ala Ile Ser Phe Ser
                                    90
Gly Cys Leu Thr Gln Leu Tyr Phe Leu Cys Val Phe Ala Asp Met Asp
           100
                                105
                                                    110
Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                            120
His Pro Leu His Tyr Thr Thr Lys Met Thr His Gln Leu Cys Ala Phe
                        135
                                            140
```

Leu Val Val Gly Ser Trp Met Val Ala Ser Leu Asn Ala Leu Leu His

155

```
Thr Leu Leu Val Ala Gln Leu Tyr Phe Cys Gly Asp Asn Val Ile Pro
                                    170
His Phe Phe Cys Glu Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp
            180
                                185
Thr His Leu Asn Glu Leu Met Ile Leu Ala Val Ala Gly Leu Ile Met
                            200
Leu Ala Pro Phe Val Cys Ile Leu Leu Ser Tyr Ile Leu Ile Ala Cys
                        215
Ala Ile Leu Lys Ile Ser Ser Thr Gly Arg Trp Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Ile Ile
                                    250
Ser Leu Tyr Phe Asn Pro Ser Ser Ser His Ser Ala Gly Arg Asp Met
                                265
Ala Ala Met Met Tyr Thr Val Val Thr Pro Met Met Lys Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Arg Lys Val
                    295
Leu Thr Met Arg Phe Ile Ser Thr Gln
                    310
```

<210> 1569 <211> 312

<212> PRT <213> Mus musculus

<400> 1569

Met Glu Pro Glu Asn His Thr Gly Ile Pro Glu Phe Tyr Leu Leu Gly Leu Ser Glu Asn Pro Glu Ile Gln Ser Val Leu Phe Gly Leu Phe Leu 25 Ser Leu Tyr Leu Val Thr Val Phe Gly Asn Leu Leu Ile Ile Leu Ala 40 Ile Val Ser Asp Pro Lys Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 Asn Leu Ser Phe Ser Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys 70 75 Met Leu Leu Gly Ile Gln Thr Gln Ser Lys Leu Ile Thr Tyr Ala Gly 90 Cys Ile Thr Gln Met Tyr Phe Phe Thr Val Phe Gly Leu Leu Asp Asn 105 100 110 Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His 120 125 Pro Leu His Tyr Thr Val Leu Met Asn Pro Lys Leu Cys Ser Gln Leu 135 140 Leu Leu Ala Trp Leu Ile Ser Ile Leu Gly Ala Leu Pro Glu Ser 150 155 Leu Thr Ala Leu Arg Leu Ser Phe Cys Ala Val Val Glu Ile Pro His 165 170 Tyr Phe Cys Glu Leu Pro Glu Val Leu Lys Leu Ala Cys Ser Asp Thr 185 190 Phe Ile Asn Asn Val Val Leu Tyr Ile Val Thr Gly Ile Met Gly Phe 200 Phe Pro Leu Ala Gly Ile Leu Phe Ser Tyr Ser Gln Ile Val Thr Ser 215 Val Leu Arg Ile Ser Thr Val Gly Gly Lys Tyr Lys Ala Phe Ser Thr 235 230 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Cys Leu

```
250
                245
Gly Val Tyr Leu Ser Ser Ile Trp Thr Gln Ala Ser Trp Ala Gly Val
            260
                                265
                                                    270
Phe Ala Ser Val Leu Tyr Thr Val Val Thr Pro Met Met Asn Pro Phe
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Asn Thr Leu
                        295
                                            300
Leu Cys Ser Val Pro Ser Ser Ser
                    310
<210> 1570
<211> 319
<212> PRT
<213> Mus musculus
<400> 1570
Met Val Gln Gly Asn Trp Thr Ser Val Thr Val Phe Val Phe Leu Gly
Phe Ser His Tyr Pro Arg Ile Glu Val Thr Val Phe Val Leu Cys Leu
Leu Met Tyr Leu Ile Thr Leu Leu Gly Asn Thr Ile Leu Ile Ser Ile
        35
                            40
Thr Ilė Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Phe Leu Asp Ile Trp Tyr Thr Ser Ser Ala Leu Thr Pro
                    70
Met Leu Ala Asn Phe Val Ser Gly Lys Asn Thr Ile Ser Phe Ser Gly
Cys Ala Ser Gln Met Tyr Phe Ser Leu Ala Met Gly Ser Thr Glu Cys
                                105
Val Leu Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                 125
Pro Leu Arg Tyr Pro Ile Ile Met Asn Arg Arg Val Phe Val Gln Ile
                        135
                                            140
Ala Gly Ser Ser Trp Val Thr Gly Cys Leu Thr Ala Leu Val Glu Thr
                    150
                                        155
Gly Pro Val Ile His Leu Ser Leu Cys Gly Asn Ser Ile Ile Asn His
                                    170
Phe Thr Cys Glu Ile Leu Ala Leu Leu Lys Met Ala Cys Gly Asp Thr
            180
                                185
                                                    190
Ser Met Val Gln Leu Ile Met Leu Val Ile Ser Ile Leu Leu Pro
        195
                            200
Leu Pro Met Leu Leu Ile Cys Val Ser Tyr Ala Ser Ile Leu Ser Asn
                        215
                                            220
Ile Leu Arg Ile Ser Ser Met Asp Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ala His Leu Thr Val Val Val Leu Phe Tyr Gly Thr Ala Leu
                                    250
Ser Met Tyr Leu Lys Pro Ser Ser Val Asn Ser Gln Glu Ile Asp Lys
Phe Met Ala Leu Ile Tyr Ala Gly Leu Thr Pro Met Leu Asn Pro Ile
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Met Ala Val Lys Lys Leu
                        295
Leu Met Arg Asn Pro Phe Ser Ala Ile Leu Thr Ser Val Leu Lys
                    310
                                        315
```

```
<210> 1571
<211> 316
<212> PRT
<213> Mus musculus
<400> 1571
Met Glu Trp Glu Asn Arg Thr Tyr Leu Glu Glu Phe Phe Leu Lys Gly
                                    10
Leu Ser Gly Tyr Pro Gly Leu Glu His Leu Phe Phe Val Val Ile Leu
            20
                                25
Met Met Tyr Ala Val Ile Leu Val Gly Asn Gly Thr Leu Ile Ile Leu
                            40
Ser Ile Phe Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Gly
                        55
Asn Leu Ser Phe Leu Asp Ile Cys Phe Thr Thr Ser Ser Ile Pro Phe
                    70
                                        75
Thr Leu Val Ser Phe Leu Ser Glu Arg Lys Thr Ile Ser Phe Leu Gly
                                    90
                85
Cys Ala Val Gln Met Phe Leu Gly Leu Ala Met Gly Thr Thr Glu Cys
                                105
            100
                                                    110
Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn
                            120
        115
                                                125
Pro Leu Arg Tyr Pro Leu Ile Met Ser Lys Ser Ser Tyr Val Thr Met
                        135
                                            140
Ala Thr Gly Ser Trp Phe Ser Gly Val Ala Asn Ser Ala Val Gln Thr
                    150
                                        155
Ala Phe Val Met Arg Leu Pro Phe Cys Gly Asn Val Ile Asn His Phe
                                    170
                165
                                                        175
Leu Cys Glu Ile Leu Ala Val Met Lys Met Ala Cys Thr Asp Ile Ser
            180
                                185
                                                    190
Gly Asn Glu Phe Ile Met Leu Val Ala Thr Thr Leu Phe Thr Leu Met
                            200
                                                205
Pro Leu Val Leu Ile Val Ile Ser Tyr Ser Leu Ile Ile Ser Ser Ile
                        215
                                            220
Leu Ser Ile Arg Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ala His Phe Thr Val Val Ile Ile Phe Tyr Gly Thr Ile Leu Phe
                245
                                    250
Met Tyr Met Lys Pro Lys Ser Lys Asp Lys Phe Asp Ala Asp Asp Leu
            260
                                265
                                                    270
Asp Ala Thr Asp Lys Leu Ile Ser Met Phe Tyr Gly Val Met Thr Pro
                            280
Leu Met Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu
                        295
Ala Ile Lys Asn Leu Lys Gly Arg Leu Leu Gly Lys
                    310
<210> 1572
<211> 305
<212> PRT
<213> Mus musculus
<400> 1572
Met Glu Asn His Thr Leu Leu Asp Glu Phe Ile Leu Leu Gly Ile Pro
Gln Thr Gln Gly Leu Glu Thr Leu Leu Phe Val Val Phe Leu Phe Ile
Tyr Ile Phe Thr Leu Leu Gly Asn Leu Leu Ile Phe Thr Ala Ile Val
```

40 Ser Ser Ser Thr Leu His Thr Pro Met Tyr Phe Phe Leu Gly Leu Leu 55 Ser Ile Phe Asp Met Leu Phe Pro Ser Val Thr Cys Pro Lys Met Leu 70 75 Leu Tyr Leu Ser Gly Lys Ser Pro Ala Ile Ser Tyr Arg Gly Cys Ile 85 90 Ala Gln Leu Phe Phe Tyr His Phe Leu Gly Ser Thr Glu Gly Cys Leu Tyr Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu 120 Arg Tyr Met Leu Ile Met Lys Pro Gly Val Cys Leu Gly Leu Val Ile Val Ser Trp Leu Ile Gly Cys Leu Gln Ser Gly Ile Leu Thr Phe Phe 150 Thr Phe Gln Leu Thr Tyr Cys Gly Pro Asn His Val His His Phe Phe 170 Cys Asp Ile Pro Ala Val Leu Pro Leu Ala Cys Thr Asp Asn Lys Leu Ala Arg Lys Val Gly Ser Ile Asn Val Gly Phe Leu Ala Leu Met Leu 195 200 Leu Phe Ser Val Cys Val Ser Tyr Val His Ile Gly Val Ala Ile Leu 220 215 Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Phe Thr Cys Ser Ala His Leu Thr Ala Ile Leu Cys Ala Tyr Gly Pro Val Ile Ile Ile 250 Tyr Leu Gln Arg Thr Pro Asn Pro Leu Leu Gly Ala Val Val Gln Ile 260 265 Leu Asn Asn Ile Val Ser Pro Met Leu Asn Ser Leu Ile Tyr Ser Leu 280 Arg Asn Lys Glu Val Lys Arg Ala Leu Arg Arg Val Phe His Ser Leu Ala 305

<210> 1573

<211> 311

<212> PRT

<213> Mus musculus

<400> 1573

 Met
 Ser
 Ile
 Arg
 Asn
 His
 Ser
 Thr
 Val
 Thr
 Glu
 Phe
 Leu
 Leu
 Leu
 Phe
 Phe</th

Pro Leu Leu Tyr Ala Val Ile Met Ser Pro Arg Val Cys Ser Leu Leu 135 Val Ala Ala Val Phe Ser Val Gly Phe Thr Asp Ala Val Ile His Gly 150 155 Gly Cys Ile Leu Arg Leu Ser Phe Cys Lys Ser Asn Ile Ile Lys His 170 165 Tyr Phe Cys Asp Ile Val Pro Leu Ile Gln Leu Ser Cys Ser Ser Thr 185 Tyr Ile Asp Glu Leu Leu Ile Phe Val Ile Gly Gly Phe Asn Met Ile 200 195 Ala Thr Ser Leu Thr Ile Val Ile Ser Tyr Gly Phe Ile Leu Ser Ser 215 Ile Leu Arg Ile His Ser Lys Glu Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Leu Thr Ala Val Leu Ile Phe Tyr Gly Ser Leu Met 250 Ser Met Tyr Leu Lys Pro Ala Ser Asn Gly Ser Val Ile His Glu Lys 265 Val Thr Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys His Ala Leu Val Lys Leu 295 Val Arg Arg Lys Ile Ser Ser

<210> 1574 <211> 321 <212> PRT

<213> Mus musculus

<400> 1574

Met Val Glu Arg Met Gln Tyr Leu Asn Gln Ser Val Val Ser Gln Phe Phe Leu Glu Gly Leu Met Tyr Thr Ala Glu His Pro Gly Leu Phe Phe 25 Leu Leu Phe Leu Leu Ile Tyr Ser Ile Thr Val Ser Gly Asn Leu Leu Ile Leu Leu Thr Val Gly Ser Asp Pro His Leu Arg Ser Pro Met Tyr His Phe Leu Gly His Leu Ser Phe Leu Asp Ala Cys Leu Ser Thr Val Thr Val Pro Lys Val Met Ala Gly Leu Leu Thr Leu Asp Gly Lys Val Ile Ser Phe Gln Gly Cys Ala Leu Gln Leu Tyr Cys Phe His Phe Leu 105 Ala Ser Thr Glu Cys Phe Leu Tyr Thr Val Met Ala Tyr Asp Arg Tyr 120 Leu Ala Ile Cys Gln Pro Leu His Tyr Pro Val Val Met Asn Lys Arg 135 Val Cys Ala Gly Leu Ala Gly Ser Thr Trp Ala Ile Gly Ala Met His 155 Ser Ala Ile His Thr Ser Leu Thr Phe Arg Leu Leu Tyr Cys Gly Pro 170 175 Gln His Ile Ala Tyr Phe Phe Cys Asp Ile Pro Pro Val Leu Lys Leu 185 190 Ala Cys Ala Asp Thr Thr Ile Asn Glu Leu Val Met Leu Ala Asn Ile 200 Gly Val Val Ala Ala Gly Cys Leu Ile Leu Ile Ile Ile Ser Tyr Ala

```
220
    210
                        215
Phe Ile Val Ala Ala Val Leu Arg Ile Arg Thr Ala Glu Gly Arg Gln
                                         235
                    230
Arg Ala Phe Ser Thr Cys Thr Ala His Leu Thr Val Val Leu Leu Tyr
                245
                                     250
Tyr Met Pro Pro Val Cys Ile Tyr Leu Gln Pro Ser Ser Thr Gly Ala
                                 265
                                                     270
Gly Ala Gly Ala Pro Ala Val Phe Tyr Thr Ile Val Thr Pro Met Leu
        275
                            280
                                                 285
Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Leu
                        295
                                             300
Arg Arg Leu Val Cys Ser Ser Gln Glu Ser Pro Ala Ser Ser Pro Ala
                    310
                                         315
Pro
```

<210> 1575 <211> 308 <212> PRT

<213> Mus musculus

<400> 1575 Met Gln Gly Pro Asn Gln Thr Phe Val Thr Glu Phe Ile Leu Leu Gly Phe Ser Leu Ser Pro Arq Thr Thr Pro Leu Leu Phe Ser Ala Phe Leu Ile Ile Tyr Leu Leu Ile Ile Leu Gly Asn Gly Leu Ile Phe Ile Leu Ile Cys Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Ile Gly Val Leu Ser Met Leu Asp Leu Gly Tyr Thr Thr Thr Thr Val Pro Gln Met Leu Ala His Leu Ala Ser Gln Lys Lys Thr Ile Ser Tyr Ser Asn Cys Val Ala Gln Met Tyr Ile Phe Leu Val Leu Gly Val Thr Glu Ser Trp Leu Phe Ala Ile Met Ser Ile Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Lys Val Ile Met Ser Pro Cys Leu Cys Gly Val Met Ala Ile Phe Cys Gly Leu Cys Gly Val Thr Ala Ala Leu Val Tyr Thr Ile Phe Ala Met Arg Leu Pro Tyr Cys Gly Pro Asn Lys Ile Asn His Phe Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys Ala Asp Thr Ser Val Asn Asp His Val Asp Phe Ile Leu Gly Phe Ser Val Ile Leu Ile Pro Leu Ser Leu Ile Leu Val Ile Tyr Ile Asn Ile Phe Thr Ser Ile Leu Lys Ile Arg Ser Ala Gln Gly Arg Leu Lys Ala Phe Ser Thr

Cys Ala Ser His Ile Thr Val Val Thr Met Phe Cys Val Pro Ala Met 245 250 255 Val Met Tyr Met Lys Pro Gly Ser Lys Ala Ser Pro Glu Glu Asp Lys 260 265 270 Lys Leu Ala Leu Phe Tyr Asn Val Ile Ser Ala Phe Leu Asn Pro Val

275 280 285

```
Asn Arg Leu Trp
305
<210> 1576
<211> 315
<212> PRT
<213> Mus musculus
<400> 1576
Met Gln Gly Ser Ser Tyr Glu Asn His Ser Ser Val Ser Glu Phe Ile
Leu Leu Gly Phe Ser Ser Asn Phe Gln Leu Asn Ile Ile Leu Phe Asn
Val Phe Phe Leu Tyr Leu Ser Thr Leu Val Gly Asn Gly Leu Ile
Val Thr Leu Ile His Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ser Val Leu Ser Met Leu Asp Met Ser Tyr Val Thr Thr
                                        75
Val Pro Gln Met Leu Val His Leu Leu Cys Gln Lys Lys Thr Ile Ser
                85
                                    90
Tyr Ser Gly Cys Val Ala Gln Met Tyr Ile Phe Leu Val Leu Gly Ile
            100
                                105
Thr Glu Gly Trp Leu Phe Ser Val Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                125
Ile Cys His Pro Leu Arg Tyr Lys Val Ile Met Arg Pro Trp Leu Cys
                        135
                                            140
Gly Ala Met Val Val Phe Cys Gly Leu Trp Gly Val Ser Cys Ser Leu
                    150
                                        155
Ile Tyr Thr Val Phe Thr Met Arg Leu Pro Tyr Cys Gly Pro Asn Glu
                165
                                   170
Ile Asn His Phe Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys
           180
                                185
                                                    190
Ala Asp Thr Ser Leu Asn Asp Arg Ile Asp Phe Ile Leu Gly Phe Ile
                            200
                                                205
Leu Leu Val Pro Leu Ser Phe Ile Leu Ala Ser Tyr Val Cys Ile
                        215
                                            220
Phe Ala Thr Ile Leu Arg Ile Arg Ser Ala Gln Gly Arg Leu Lys Ala
                    230
                                        235
Phe Ser Thr Cys Ala Ser His Ile Thr Val Val Thr Met Phe Cys Gly
                245
                                    250
Pro Ala Met Phe Met Tyr Met Asn Pro Gly Ala Asn Ala Ser Pro Glu
            260
                                265
Arg Asp Lys Lys Leu Ala Leu Phe Tyr Asn Val Ile Ser Ala Phe Leu
        275
                            280
                                                285
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Arg Ala Phe
                       295
Leu Lys Val Thr Gly Trp Gly Gly Ala Thr Glu
<210> 1577
<211> 309
<212> PRT
<213> Mus musculus
```

Ile Tyr Ser Leu Arg Asn Lys Glu Cys Glu Glu Gly Phe Pro Gln Gly

```
<400> 1577
Met Ala Asn Ser Thr Leu Val Pro Glu Phe Leu Leu Glu Val Phe Ala
Glu Thr Trp Glu Leu Arg Ile Leu Leu Thr Val Leu Phe Leu Leu Met
Tyr Leu Gly Ser Leu Leu Gly Asn Leu Ile Ile Ile Ala Thr Thr
Val Asp His Ile Leu Asn Thr Pro Met Tyr Phe Phe Leu Arg Asn Leu
Ser Ile Leu Asp Met Gly Tyr Val Ser Val Thr Val Pro Asn Ala Cys
                    70
                                        75
Ile Asn Ser Leu Thr Asp His Arg Ser Ile Ser Leu Ala Gly Cys Ala
                85
Gly Gln Ile Phe Leu Val Phe Phe Ser Ala Cys Val Glu Ile Gln Phe
                                105
            100
Leu Thr Ile Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
        115
Leu Tyr Ala Met Ile Met Asn His Gln Phe Cys Val Gln Met Thr Leu
    130
                        135
Ala Ser Leu Leu Thr Ser Leu Ile Leu Ala Ser Val His Thr Ser Lys
                    150
                                        155
145
Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Ser Gln Phe Phe
                165
                                    170
Cys Asp Ile Pro Ser Leu Leu Arg Leu Ser Cys Thr Asp Thr Phe Ile
            180
                                185
                                                    190
Asn Lys Leu Leu Leu Leu Thr Ala Ile Val Phe Ser Gly Ser Cys
                            200
                                                205
        195
Phe Thr Phe Ile Ala Ile Ser Tyr Val Arg Ile Leu Ser Thr Val Leu
                        215
                                            220
Lys Val Pro Val Lys Gly Glu Arg Gly Lys Ala Phe Ser Thr Cys Val
                    230
                                        235
Pro His Ile Ile Val Val Ser Val Phe Leu Ser Ser Gly Ala Tyr Val
                245
                                    250
Tyr Leu Lys Pro Ser Ala Ile Ser Glu Ile Val Glu Asp Met Thr Leu
            260
                                265
                                                 . 270
Ser Val Phe Tyr Thr Ile Val Pro Pro Phe Leu Asn Pro Ile Ile Tyr
                            280
Ser Leu Arg Asn Lys Gln Ile Lys Lys Ala Val Lys Lys Val Ile Phe
Arg Phe Phe Ile Val
305
<210> 1578
<211> 312
<212> PRT
<213> Mus musculus
<400> 1578
Met Glu Pro Ser Asn Arg Thr Ala Val Ser Glu Phe Val Leu Lys Gly
                                    10
Phe Ser Gly Tyr Pro Ala Leu Glu Arg Leu Leu Phe Pro Leu Cys Ser
                                25
Val Met Tyr Leu Val Thr Leu Leu Gly Asn Thr Ala Ile Val Ala Val
Ser Met Leu Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly
Asn Leu Ser Ile Leu Asp Ile Cys Tyr Thr Ser Thr Phe Val Pro Leu
                    70
                                        75
```

```
Met Leu Val His Leu Leu Ser Ser Arg Lys Thr Ile Ser Phe Thr Gly
                                     90
Cys Ala Val Gln Met Cys Leu Ser Leu Ser Thr Gly Ser Thr Glu Cys
                                 105
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Gln
                             120
Pro Leu Arg Tyr Pro Val Leu Met Ser His Arg Leu Cys Leu Met Leu
                                             140
Ala Gly Ala Ser Trp Val Leu Cys Leu Phe Lys Ser Val Ala Glu Thr
                     150
                                         155
·Val Ile Ala Met Arg Leu Pro Phe Cys Gly His His Val Ile Arg His
                165
                                     170
 Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Thr Cys Gly Asp Thr
                                                     190
                                 185
Ser Val Ser Asp Ala Phe Leu Leu Val Gly Ala Ile Leu Leu Pro
                                                 205
        195
                             200
Ile Pro Leu Thr Leu Ile Cys Leu Ser Tyr Met Leu Ile Leu Ala Thr
                         215
Ile Leu Arg Val Pro Ser Ala Thr Gly Arg Ser Lys Ala Phe Ser Thr
                                         235
                     230
Cys Ser Ala His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile
                                     250
 Phe Met Tyr Met Lys Pro Lys Ser Lys Glu Ala Arg Ile Ser Asp Gln
                                 265
Val Phe Thr Val Leu Tyr Ala Val Val Thr Pro Met Leu Asn Pro Ile
 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Ala Arg Lys Ala
                         295
 Trp Gly Ser Arg Trp Ala Cys Arg
```

<210> 1579 <211> 319 <212> PRT

<213> Mus musculus

<400> 1579

Met Glu Arg Ser Asn Lys Thr Thr Pro Val Ser Ser Phe Ile Leu Leu Gly Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu Ile Leu Leu Met Tyr Leu Val Ile Leu Leu Gly Asn Val Val Leu Ile Leu Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val Pro 70 Leu Ile Leu Asp Ser Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe Ser 90 Gly Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr Glu 105 Cys Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Pro Val Val Met Ser Lys Ala Ala Tyr Val Pro 140 Met Ala Ala Gly Ser Trp Val Ser Gly Ser Ile Thr Ala Thr Val Gln 150 155 Ile Ser Leu Ala Met Thr Leu Pro Phe Cys Gly Asp Asn Val Ile Asn

```
165
                                    170
His Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp
                                                    190
           180
                                185
Ile Ser Ile Asn Val Ile Ser Met Ala Val Ala Asn Ala Met Phe Leu
                            200
       195
Gly Val Pro Val Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser
                        215
Thr Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ser Ala His Leu Thr Val Val Leu Val Phe Tyr Gly Thr Ile
                245
                                    250
Leu Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp
           260
                                265
Lys Gln Asp Leu Ala Asp Lys Leu Ile Ser Leu Phe Tyr Gly Val Val
       275
                            280
Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val
                        295
                                            300
Lys Ala Ala Val Thr Asn Leu Val Gly Gln Lys His Phe Lys Trp
                    310
<210> 1580
<211> 318
<212> PRT
<213> Mus musculus
<400> 1580
Met Glu Gly Ala Asn Gln Ser Thr Val Ala Glu Phe Val Leu Leu Gly
1
                                    10
Leu Ser Asp His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu Ile Leu
                                25
Leu Met Tyr Leu Val Ile Leu Leu Gly Asn Gly Val Leu Ile Leu Val
       35
                            40
Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Gly
                        55
                                             60
Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Ile Pro Leu
                    70
Val Leu Asp Gly Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe Ser Gly
                                    90
                85
Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr Glu Cys
           100
                                105
Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
        115
Pro Leu Arg Tyr Pro Val Val Met Asn Lys Ser Ala Tyr Val Pro Met
                        135
                                            140
Ala Val Ser Ser Trp Val Ala Gly Gly Ala Asn Ser Leu Val Gln Ile
                    150
                                        155
Ser Leu Ala Val Gln Leu Pro Phe Cys Gly Asp Asn Val Ile Asn His
                165
                                    170
Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Ile
            180
                                185
Ser Ile Asn Val Ile Ser Met Gly Val Ala Asn Val Ile Phe Leu Gly
                            200
        195
Val Pro Val Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser Thr
                        215
Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr
```

Cys Ser Ala His Leu Thr Val Val Leu Val Phe Tyr Gly Thr Ile Leu

 Phe
 Met
 Tyr
 Gly
 Lys
 Pro
 Lys
 Ser
 Lys
 Asp
 Pro
 Leu
 Gly
 Ala
 Asp
 Lys
 Lys
 Lys
 Lys
 Leu
 Ile
 Ser
 Leu
 Phe
 Tyr
 Gly
 Val
 Leu
 Thr
 Leu
 Tyr
 Ser
 Leu
 Phe
 Tyr
 Gly
 Val
 Leu
 Thr
 Leu
 Tyr
 Ser
 Leu
 Phe
 Tyr
 Gly
 Val
 Leu
 Thr

 290
 Ala
 Asn
 Pro
 Ile
 Ile
 Tyr
 Ser
 Leu
 Arg
 Asn
 Lys
 Asp
 Val
 Lys

 290
 Ala
 Ala
 Ala
 Val
 Arg
 Asn
 Leu
 Val
 Gly
 Gln
 Lys
 Cys
 Leu
 Ile
 Gln

 305
 310
 310
 315
 315
 315
 315

<210> 1581 <211> 312 <212> PRT <213> Mus musculus

<400> 1581 Met Asp Glu Glu Asn Cys Ser Thr Val Ala Gln Phe Ile Leu Leu Gly Phe Ser Asp Val Pro Glu Leu Arg Gly Val Leu Ser Leu Leu Phe Leu 25 Leu Ile Tyr Gly Val Thr Ala Leu Ala Asn Leu Gly Met Thr Ala Leu 35 40 Ile Gln Val Ser Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 60 His Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Val Pro Lys 70 75 80 Met Leu Ala Asn Ile Phe Asn Lys Asp Lys Ala Ile Ser Phe Leu Ala 90 Cys Met Val Gln Phe Tyr Leu Phe Cys Thr Cys Val Val Thr Glu Val 105 100 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Thr Ala Thr Met Ser Ser Asp Leu Arg Met Ile Leu 135 140 Val Ser Gly Cys Tyr Leu Cys Ala Ser Met Cys Ser Leu Ile His Leu 155 150 Cys Leu Ala Leu Glu Ile Pro Ser Phe Lys Ser Asn Val Ile Asn His 170 Phe Phe Cys Asp Leu Pro Pro Leu Leu Ser Leu Ala Cys Ser Asp Val 185 190 Thr Val Asn Lys Val Leu Leu Phe Val Val Ala Thr Phe Asn Glu Ser 200 205 Phe Ser Ile Val Val Ile Phe Thr Ser Tyr Leu Phe Ile Leu Ile Thr Ile Leu Arg Met Arg Ser Val Glu Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Val Ile Ile Val Phe His Gly Thr Ile Leu 245 250 Ser Ile Tyr Cys Ser Ser Thr Ser Asp Asn Ser Gly Asp Ala Asp Lys 260 265 270 Val Ala Thr Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu 275 280 285 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Arg Lys Val 295 300 Val Asn Ser Lys Ile Tyr Ser Gln

310

```
<400> 1582
Met Leu Leu Thr Tyr Gly Asn Asn Ser Gly Ala Met Phe Ile Leu Leu
                                    10
Ser Phe Ser Asp Tyr Pro Glu Ile Glu Met Pro Leu Phe Leu Val Phe
                                25
Leu Ala Ile Tyr Ser Ile Thr Val Val Gly Asn Ile Gly Met Ile Val
Ile Ile Arg Ile Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Ala Pro
Lys Met Leu Val Asn Leu Phe Ile Lys Asn Arg Ala Ile Ser Phe Leu
Glu Cys Ile Val Gln Tyr Phe Phe Phe Ala Ile Phe Val Val Thr Glu
            100
                                105
Thr Ile Leu Leu Val Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                            120
Arg Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Lys Leu Cys Ile Ser
                        135
                                            140
Leu Val Val Gly Ser Tyr Ala Trp Gly Leu Ile Cys Ser Leu Thr Met
                    150
                                        155
Thr Cys Ser Ile Ile Gln Leu Ser Phe Val Gly Ile Asn Thr Ile Asp
                165
                                    170
His Phe Phe Cys Glu Phe Ser Ser Leu Leu Val Leu Ser Cys Ser Asp
            180
                                185
                                                     190
Thr His Val Asn Gln Ile Leu Leu Phe Ser Leu Ser Thr Val Asn Ala
        195
                            200
Leu Ser Thr Leu Leu Ile Ile Leu Leu Ser Tyr Met Phe Ile Leu Val
                        215
                                             220
Thr Ile Leu Lys Met Gln Ser Ser Arg Gly Arg Gln Lys Ala Phe Tyr
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Thr Ile Thr Ile Phe Tyr Gly Thr Ile
                                    250
Leu Phe Leu Tyr Ser Val Pro Asn Ser Lys Asn Ser Gln Leu Thr Phe
            260
                                265
                                                     270
Lys Val Ala Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Arg Gln
                                             300
Ile Met Lys Ile Lys Phe Ile Ala Leu Pro His Leu Ser Ser Lys Val
305
                    310
                                                             320
Arg
<210> 1583
<211> 308
<212> PRT
<213> Mus musculus
<400> 1583
Met Asp Glu Glu Asn Ile Thr Glu Val Thr Glu Phe Ile Leu Leu Gly
                5
                                    10
Phe Thr Glu Asp Ala Val Leu Gln Gln Val Leu Phe Phe Ile Phe Leu
                                                    30
            20
                                25
```

<211> 321 <212> PRT

<213> Mus musculus

```
Thr Ile Tyr Ile Ile Ser Leu Leu Gly Asn Ile Thr Leu Ile Ser Leu
Ile Cys Ala Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly
Asn Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val Tyr Ala Pro Lys
                    70
Ile Leu Ile Thr Cys Ile Thr Glu Asp Lys Ser Ile Ser Phe Ala Gly
                8.5
                                    90
Cys Leu Ala Gln Phe Phe Ser Ala Gly Leu Ala Tyr Ser Glu Cys
                                105
Tyr Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn
                            120
Pro Leu Leu Tyr Phe Gln Ala Met Ser Pro Arg Leu Arg Ala Ser Leu
                                            140
Val Ala Ala Ser Tyr Leu Gly Gly Phe Ala Asn Ser Thr Ile Ile Thr
                    150
                                        155
Ser Glu Thr Phe Thr Leu Ser Phe Cys Arg Asp Asn Ile Ile Asp Asp
                                    170
Phe Phe Cys Asp Leu Pro Pro Leu Val Lys Leu Ala Cys Asp Val Lys
            180
                                185
                                                    190
Glu Ser Tyr Gln Ala Val Leu Tyr Phe Ile Leu Ala Ser Asn Val Ile
        195
                            200
Thr Pro Thr Val Leu Ile Leu Ala Ser Tyr Leu Phe Ile Ile Val Ala
                        215
                                            220
Ile Leu Lys Ile Arg Ser Thr Gln Gly Arg Leu Lys Ala Phe Ser Thr
                    230
Cys Gly Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Ser Ile Leu
                245
                                    250
Phe Ile Tyr Ser Arg Pro Ser Thr Ser Tyr Ala Leu Glu Arg Asp Lys
                                265
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Met
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu Arg Lys Met
   290
                        295
Leu Asp Ile Val
```

<210> 1584 <211> 313 <212> PRT

<213> Mus musculus

<400> 1584

 Met
 Lys
 Glu
 His
 Asn
 Leu
 Thr
 Val
 Met
 Thr
 Glu
 Phe
 Ile
 Leu
 Met
 Gly

 Ile
 Ser
 Asp
 His
 Ser
 Glu
 Leu
 Gln
 Ala
 Pro
 Leu
 Phe
 Gly
 Leu
 Phe
 Leu
 Asp
 Leu
 Asp
 Leu
 Gly
 Asp
 Leu
 Asp
 Leu
 Asp
 Leu
 Gly
 Thr
 Pro
 Met
 Tyr
 Phe
 Phe
 Phe
 Leu
 Arg

 Thr
 Thr
 Val
 Asp
 Leu
 Gly
 Tyr
 Pro
 Met
 Tyr
 Phe
 Phe
 Phe
 Leu
 Arg

 Thr
 Thr
 Val
 Asp
 Leu
 Gly
 Tyr
 Ser
 Thr
 Ala
 Val
 Phe
 Leu
 Arg
 Thr
 Ala
 Phe
 Arg
 Leu
 Arg
 Thr
 Arg
 Thr
 Arg
 Thr
 Arg

```
120
Pro Leu Leu Tyr Thr Val Leu Met Ser Gln Lys Leu Cys Trp Val Leu
                        135
                                            140
Met Ser Met Pro Tyr Leu Tyr Cys Thr Phe Val Ser Leu Leu Ile Thr
                    150
                                         155
Val Lys Ile Phe Thr Ser Ser Phe Cys Gly Tyr Asn Val Ile Asn His
                                    170
Phe Tyr Cys Asp Cys Ile Pro Leu Leu Ser Leu Leu Cys Ser His Ala
            180
                                185
Glu Glu Ile Ala Phe Ile Val Met Ile Phe Ala Ala Phe Asp Leu Ile
        195
                            200
Val Ser Leu Leu Ile Val Leu Val Ser Tyr Met Phe Ile Leu Ile Ala
                        215
Val Leu Arg Met Asn Ser Ala Glu Gly Arg Tyr Lys Ala Phe Ser Thr
                    230
                                         235
Cys Gly Ser His Leu Thr Val Val Thr Val Phe Tyr Gly Thr Leu Ile
                245
Phe Met Tyr Val Gln Pro Gln Ser Ser His Ser Asp Asp Asn Asp Lys
Val Ser Ser Ile Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Phe Ala Leu His Arg Thr
                        295
Trp Arg Asn Ile Cys Lys Ile Phe Pro
                    310
<210> 1585
<211> 313
<212> PRT
<213> Mus musculus
<400> 1585
Met Glu Lys Asn Asn Leu Thr Ala Val Thr Gln Phe Ile Leu Met Gly
                                    10
Ile Thr Glu Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
Val Ile Tyr Leu Ser Ser Met Phe Gly Asn Leu Gly Met Ile Ile Leu
        35
Thr Thr Val Asp Ser Lys Leu Gln Thr Pro Met Tyr Phe Phe Ile Arg
                        55
His Leu Ala Ile Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys
                    70
Met Leu Val Asn Phe Val Val Asp Leu Asn Ile Ile Ser Tyr Asn Leu
Cys Ala Thr Gln Leu Ala Phe Phe Leu Val Phe Ile Ile Ser Glu Leu
                                105
                                                     110
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
                                                 125
Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Arg Val Cys Gln Val Leu
                                            140
```

Val Ala Ile Pro Tyr Leu Tyr Cys Thr Phe Val Ser Leu Leu Val Thr

Ile Lys Ile Phe Thr Leu Ser Phe Cys Gly Tyr Asn Val Ile Ser His

Phe Tyr Cys Asp Ser Leu Pro Leu Leu Ser Leu Ile Cys Ser Asn Thr

Asn Glu Ile Glu Met Ile Ile Leu Val Leu Ala Ala Phe Asn Leu Ile

200

185

155

190

205

170

150

165

180

```
        Ser
        Ser
        Leu
        Leu
        Val
        Leu
        Val
        Ser
        Tyr
        Leu
        Phe
        Ile
        Leu
        Ile
        Ala

        210
        Ile
        Leu
        Arg
        215
        Ile
        220
        Ile
        Ile
```

<210> 1586 <211> 308 <212> PRT <213> Mus musculus

<400> 1586

Met Asn Pro Glu Phe Met Leu Val Gly Leu Thr Asp Ser Lys Glu Ile Gln Leu Val Leu Ser Val Leu Phe Leu Leu Ile Tyr Met Leu Thr Val 25 Leu Gly Asn Ile Gly Ile Ile Leu Ile Ile His Leu Asp Val Gln Leu His Thr Pro Met Tyr Phe Phe Leu Thr His Leu Ser Phe Leu Asp Leu 5.5 Ser Tyr Ser Thr Val Ile Thr Pro Lys Thr Leu Gln Asn Thr Leu Thr 75 Ser Ile Lys Asn Ile Ser Phe Met Gly Cys Phe Thr Gln Leu Tyr Phe 90 Phe Ala Phe Leu Ala Gly Ser Glu Cys Phe Ile Leu Ser Ser Met Ala 100 105 Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Val Ile 120 Met Ser Pro Arg Arg Ser Tyr Ile Leu Ile Thr Val Ser Tyr Ile Val 135 140 Gly Ala Ile Asp Ser Ser Ala Thr Val Phe Trp Leu Ser Thr Leu Asp 155 150 Phe Cys Asn Ser Thr Val Ile His His Phe Phe Cys Asp Thr Phe Pro 165 170 Ile Leu Ala Leu Ser Cys Ser Asp Thr Tyr Asn Ala Glu Ala Thr Ile 185 Phe Val Leu Ala Gly Ser Thr Leu Leu Leu Ser Leu Ile Thr Ile Ser 200 205 Ala Ser Tyr Val Ser Ile Leu Ser Thr Ile Leu Lys Ile Asn Ser Ser 220 215 Ser Gly Lys His Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ile Gly 235 Val Thr Val Phe Tyr Gly Thr Thr Ile Phe Thr Tyr Leu Lys Pro Ser 250 Thr Ser Tyr Ser Leu Gly Lys Asp Gln Val Ala Pro Val Phe Tyr Thr 265 Ile Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys 280 Glu Val Lys Ser Ala Val Val Arg Val Met Lys Lys Arg Glu Cys Ile

290 295 300 Gln Lys Leu Lys 305

<210> 1587 <211> 312 <212> PRT <213> Mus musculus

<400> 1587 Met Arg Val Trp Asn His Thr Gly Val Lys Glu Phe Met Leu Leu Gly 10 Leu Thr Glu Asn Pro Asn Cys Gln Val Pro Leu Phe Leu Leu Phe Ser 25 Ile Val Tyr Leu Ile Ile Leu Val Gly Asn Trp Gly Met Ile Ile Leu 40 Ile Trp Leu Asn Ala His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Val Ile Ala Pro Lys 70 Met Leu Ile Asp Phe Leu Ser Glu His Lys Ser Ser Thr Phe Phe Gly 90 Cys Val Leu Gln Ser Phe Phe Phe Ala Val Tyr Ile Thr Thr Glu Gly 105 Ile Leu Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Ala Asn 120 125 Pro Leu Met Tyr Thr Val Ile Met Thr His Arg Ile Cys Ser Gln Met 135 Val Leu Ala Cys Tyr Leu Gly Gly Leu Ile Asn Ser Leu Thr His Thr 150 155 Ile Gly Leu Leu Arg Leu Asp Phe Cys Gly Pro Asn Ile Val Asn His 170 165 Phe Phe Cys Asp Ile Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Ala 180 185 190 His Ile Asn Glu Met Leu Leu Val Phe Ser Gly Val Ile Ala Ile 195 200 Phe Thr Phe Ile Ile Val Met Val Ser Tyr Ile His Ile Ile Ile Ala 215 Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Ala Val Ile Leu Phe Tyr Gly Ser Val Thr 250 Phe Ser Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Met Glu Gln Glu Lys 265 Val Ser Ala Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ala Lys Lys Phe 295 Ile Gly Arg Glu Arg Arg Thr Ser

<210> 1588

305

<211> 315

<212> PRT

<213> Mus musculus

310

<400> 1588

```
Met Ser Ala Cys Asn His Thr Asn Glu Pro Glu Phe Thr Leu Val Gly
Leu Thr Asp Ser Lys Glu Ile Gln Leu Val Leu Ser Val Leu Phe Leu
Leu Ile Tyr Met Leu Thr Val Leu Gly Asn Ile Gly Met Ile Leu Ile
Ile His Leu Asp Val Gln Leu His Thr Pro Met Tyr Phe Phe Leu Thr
His Leu Ser Phe Leu Asp Leu Ser Tyr Ser Thr Val Ile Thr Pro Lys
                    70
                                        75
Thr Leu Gln Asn Thr Leu Thr Ser Ile Lys Asn Ile Ser Phe Met Gly
                                    90
Cys Phe Thr Gln Leu Tyr Phe Phe Val Leu Leu Ala Ala Ser Glu Cys
Phe Ile Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu His Tyr Pro Val Ile Met Ser Pro Arg Arg Ser Tyr Thr Leu
                        135
                                            140
Ile Thr Val Ser Tyr Met Ile Gly Val Leu Asp Ser Ser Val Thr Val
                    150
                                        155
Phe Cys Leu Ser Thr Leu Asp Phe Cys Asn Ser Lys Val Ile His His
                165
                                    170
Phe Phe Cys Asp Thr Phe Pro Ile Leu Ala Leu Ser Cys Ser Asp Thr
            180
                                185
                                                    190
Tyr Asn Ala Glu Ala Thr Ile Phe Val Leu Ala Gly Ser Thr Leu Leu
                            200
Leu Ser Leu Ile Thr Ile Ser Ser Ser Tyr Val Ser Ile Leu Ser Thr
                        215
Ile Leu Lys Ile Asn Ser Ser Ser Gly Lys His Lys Ala Phe Ser Thr
                                        235
Cys Ala Ser His Leu Ile Gly Val Thr Val Phe Tyr Gly Thr Met Ile
                                    250
Phe Thr Tyr Leu Lys Pro Ser Thr Ser Tyr Ser Leu Gly Lys Asp Gln
Val Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Val Val Arg Val
   290
                        295
Met Lys Lys Arg Glu Cys Ile Gln Lys Leu Glu
                    310
```

```
<210> 1589
```

<400> 1589

 Met
 Glu
 Lys
 Ala
 Val
 Leu
 Ile
 Asn
 Gln
 Thr
 Ser
 Val
 Met
 Ser
 Phe
 Arg

 Leu
 Thr
 Gly
 Leu
 Ser
 Thr
 Asn
 Pro
 Lys
 Val
 Gln
 Met
 Ala
 Ile
 Phe
 Phe
 Phe
 De
 Leu
 Thr
 Leu
 Ile
 Asn
 Ile
 Ile

<211> 313

<212> PRT

<213> Mus musculus

```
90
Phe Asp Asp Cys Val Val Gln Ile Phe Phe Leu His Leu Phe Ala Cys
            100
                                 105
Thr Glu Ile Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                 125
Ile Cys Lys Pro Leu Arg Tyr Met Thr Ile Met Asn Trp Lys Val Cys
                        135
Met Val Leu Gly Gly Ala Met Trp Thr Ala Gly Thr Ile His Ser Ile
                    150
                                        155
Ser Phe Thr Ser Leu Thr Ile Lys Leu Pro Tyr Cys Gly Pro Asn Glu
                                    170
Leu Asp Ser Phe Phe Cys Asp Val Pro Gln Val Ile Glu Leu Ala Cys
                                 185
Thr Asp Thr Arg Ile Thr Glu Ile Leu Val Val Ser Asn Ser Gly Met
                            200
                                                 205
Ile Ser Met Val Cys Phe Val Ile Ile Val Val Ser Tyr Ala Val Ile
                        215
                                             220
Leu Val Ser Leu Arg Gln Gln Ile Ser Asp Gly Lys Arg Lys Ala Leu
                    230
                                         235
Ser Thr Cys Ala Ala His Leu Thr Val Val Thr Leu Phe Leu Gly His
                                     250
Cys Ile Phe Ile Tyr Ser Arg Pro Ala Ile Ser Leu Pro Glu Asp Lys
Ile Val Ser Ala Phe Phe Thr Ala Ile Thr Pro Leu Leu Asn Pro Ile
                            280
Ile Tyr Thr Phe Arg Asn Glu Asp Met Lys Ser Ala Leu Lys Lys Leu
                        295
                                             300
Ile Arg Arg Lys Glu Gly Lys Glu Lys
                    310
<210> 1590
<211> 318
<212> PRT
<213> Mus musculus
<400> 1590
Met Ala Thr Ser Ser Thr Thr Leu Asn Tyr Thr Asn Val Arg Asp Ile
                5
                                                         15
Trp Tyr Thr Met Ile Gly Ile Pro Gly Leu Glu Tyr Ala His Ile Trp
                                 25
Ile Ser Ile Pro Ile Cys Ser Met Tyr Ile Val Ala Ile Ala Gly Asn
Ala Leu Leu Leu Phe Leu Ile Ile Thr Glu Arg Ser Leu His Glu Pro
                        55
Met Tyr Leu Phe Leu Ser Met Leu Ala Leu Ala Asp Ile Phe Leu Ser
                    70
Thr Val Thr Thr Pro Lys Met Leu Ala Ile Phe Trp Phe Arg Ala Gly
                                     90
Gly Ile Ser Phe Ala Ser Cys Val Ser Gln Met Phe Phe Leu His Phe
            100
                                 105
                                                     110
Ile Phe Val Ala Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg
                            120
                                                 125
Tyr Val Ala Ile Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Thr
                        135
                                             140
Ser Val Ile Ile Lys Met Gly Ile Ala Ala Val Ile Arg Ser Phe Phe
                    150
                                        155
```

Ile Cys Phe Pro Leu Ile Phe Leu Val Tyr Arg Leu Thr Tyr Cys Gly

165

170

```
Lys Ser Thr Ile Arg His Ser Tyr Cys Glu His Met Gly Ile Ala Arg
Leu Ala Cys Asp Ser Ile Lys Val Asn Ile Tyr Tyr Gly Val Ile Val
                                                 205
Ala Leu Phe Ser Thr Cys Leu Asp Ala Val Leu Ile Ile Val Ser Tyr
Ala Leu Ile Leu Cys Ala Val Phe Arg Ile Pro Ser Arg Asp Ala Arg
                                        235
Leu Lys Ala Leu Gly Thr Cys Gly Ser His Val Cys Val Ile Leu Leu
                245
                                    250
Phe Tyr Thr Pro Ala Phe Phe Ser Phe Phe Ala His Arg Phe Gly Gly
His Ser Ile Pro Leu His Val His Ile Leu Leu Ala Asn Leu Tyr Val
                            280
Val Val Pro Pro Ser Val Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys
                        295
                                            300
Gln Ile Gln Glu Arg Val Ile Gln Val Phe Ser Leu Gly Lys
```

<210> 1591 <211> 316 <212> PRT

<213> Mus musculus

<400> 1591

Met Leu Gly Trp Ser Asn Gly Thr Tyr Asn Glu Ser Tyr Thr Ser Phe 10 Leu Leu Met Gly Phe Pro Gly Met Gln Glu Ala Arg Ala Leu Leu Val 20 25 Leu Pro Phe Leu Ser Leu Tyr Leu Val Ile Leu Phe Thr Asn Ala Leu 40 Val Ile His Thr Val Ala Ser Gln Arg Ser Leu His Gln Pro Met Tyr 55 Leu Leu Ile Ala Leu Leu Ala Val Asn Ile Cys Ala Ala Thr Thr 70 75 Val Leu Pro Pro Met Leu Phe Ser Phe Ser Thr Arg Phe Asn Arg Ile 85 90 Ser Leu Pro Arg Cys Leu Gly Gln Met Phe Cys Ile Tyr Phe Leu Val 100 105 110 Ser Met Asp Cys Asn Ile Leu Leu Val Met Ala Leu Asp Arg Tyr Val 115 120 125 Ala Ile Cys Tyr Pro Leu Arg Tyr Pro Glu Ile Val Thr Gly Gln Leu 135 140 Leu Ala Gly Leu Val Val Leu Ala Val Thr Arg Ser Thr Ser Ile Val 150 155 Ala Pro Val Val Leu Ala Ser Arg Val Arg Phe Cys Arg Ser Asp 165 170 175 Val Ile Arg His Phe Ala Cys Glu His Met Ala Leu Met Lys Leu Ser 180 185 190 Cys Gly Asp Ile Ser Leu Asn Lys Thr Ala Gly Leu Ile Ile Arg Thr 195 200 Phe Asn Arg Val Leu Asp Met Leu Leu Gly Thr Ser Tyr Ser Arg 215 220 Ile Ile His Ala Ala Phe Arg Ile Ser Ser Gly Gly Ala Arg Ser Lys 230 235 Ala Leu Asn Thr Cys Gly Ser His Leu Leu Val Ile Phe Thr Val Tyr 250 Ser Ser Thr Met Ser Ser Ser Ile Val Tyr Arg Val Ala Arg Thr Ala

260 265 Ser Gln Asp Val His Asn Leu Leu Ser Ala Phe Tyr Leu Leu Pro 280 275 Cys Leu Val Asn Pro Ile Ile Tyr Gly Ala Arg Thr Lys Glu Ile Arg 295 Gln His Leu Val Arg Ser Phe Leu Ser Ala Gly Pro 310 <210> 1592 <211> 319 <212> PRT <213> Mus musculus <400> 1592 Met Glu Met Thr Asn Asp Ser Met Leu Thr Glu Phe Leu Leu Val Gly 5 Leu Ser Asp His Pro Lys Leu Gln Thr Val Leu Phe Val Leu Val Leu 25 Cys Met Tyr Leu Met Ile Leu Leu Gly Asn Gly Val Leu Ile Ala Val 35 40 Val Ile His Asp Ile Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys 55 Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Ser Ser Ser Val Pro Leu 70 75 Ile Leu Ser Ser Phe Leu Thr Val Arg Lys Arg Val Ser Phe Ser Glu 90 85 Cys Met Ile Gln Met Phe Phe Ser Phe Ala Met Gly Ala Thr Glu Cys 105 100 Val Leu Leu Gly Thr Met Ala Leu Asp Arg Phe Met Ala Ile Cys Tyr 115 120 125 Pro Leu Arg Tyr Pro Val Ile Met Ser Lys Asp Thr Tyr Val Pro Met 135 140 Ala Ala Gly Cys Trp Val Ala Gly Leu Val Asp Ser Val Val Gln Thr 150 155 Ser Leu Ala Val Gln Leu Pro Phe Cys Thr Asn Asn Val Ile His His 170 165 Phe Val Cys Glu Ile Leu Gly Ile Leu Glu Leu Ala Cys Ala Asp Ile 185 190 180 Ser Ile Asn Val Ile Ser Leu Thr Gly Ser Asn Leu Leu Phe Leu Ala 195 200 Val Pro Leu Leu Val Ile Ala Val Ser Tyr Met Phe Ile Ile Ala Thr 215 220 Ile Leu Arg Ile Pro Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser Thr 230 235 Cys Ser Ala His Leu Thr Val Val Ile Ile Phe Tyr Gly Thr Ile Phe 245 250 Ser Met Tyr Ala Lys Pro Lys Ser Lys Asp Thr Ala Gly Ala Gly His 265 Gln Ser Val Met Glu Ala Leu Ile Ser Leu Phe Tyr Gly Val Met Thr 280 Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys 295 Ala Ala Val Gln Asn Met Leu Gly Arg Lys Thr Leu Ser Lys Met 310

<212> PRT

```
Met Tyr Phe Phe Leu Ala Asn Phe Ser Ser Leu Glu Ile Cys Tyr Val
                                        75
Ser Val Thr Leu Pro Arg Ile Leu Phe Asn Ile Ala Thr Gln Asp Arg
Ser Ile Ser Val Val Ser Cys Ala Thr Gln Met Cys Phe Phe Leu Met
            100
                                105
Leu Gly Ala Thr Glu Cys Phe Leu Leu Ala Val Met Ser Tyr Asp Arg
                            120
                                                 125
        115
Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Pro
                       135
                                            140
Thr Lys Cys Thr Gln Leu Ala Ala Ala Ser Trp Leu Gly Gly Ile Pro
                    150
                                        155
Val Gln Ile Gly Gln Thr Cys Gln Ile Phe Ser Leu His Phe Cys Asn
                                    170
                165
Ser Asn Gln Ile Asp His Phe Phe Cys Asp Leu Pro Pro Ile Leu Lys
                                185
                                                    190
            180
Leu Ala Cys Gly Asp Thr Ser Ile His Glu Leu Ser Val Tyr Leu Val
        195
                            200
Ala Met Leu Phe Val Ala Phe Pro Phe Leu Leu Ile Leu Ala Ser Tyr
                        215
                                            220
Thr Lys Ile Ile Ala Thr Ile Leu Lys Leu Pro Thr Ala Thr Gly Arg
                    230
                                        235
Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val Phe Leu
                245
                                    250
Phe Phe Gly Ser Ala Thr Ile Thr Tyr Leu Arg Pro Lys Ser Thr His
                                265
                                                     270
            260
Ser Pro Gly Thr Asp Lys Leu Leu Ser Leu Phe Tyr Thr Ile Val Thr
        275
                            280
Pro Met Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile
                        295
Ala Ala Leu Arg Lys Leu Leu His Ile Lys
                    310
<210> 1595
<211> 308
<212> PRT
<213> Mus musculus
<400> 1595
Met Glu Lys Lys Asn Cys Ser Ser Val Asp Glu Phe Ile Phe Leu Gly
                                    10
Ile Thr Lys Asn Pro Asp Met Arg Val Thr Phe Phe Thr Thr Leu Leu
                                25
Leu Val Tyr Leu Ile Asn Leu Leu Ala Asn Leu Gly Met Ile Ile Leu
        35
                            40
Ile Arg Val Asn Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ser Phe Cys Asp Leu Cys Tyr Ser Thr Ala Ile Gly Pro Lys
                    70
Met Leu Val Asp Leu Leu Val Glu Glu Lys Ser Ile Pro Ile Val Gly
                                    90
Cys Ala Leu Gln Phe Phe Thr Phe Cys Ile Phe Ala Asp Ser Glu Cys
                                105
                                                     110
Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Gln Ala Ile Ser Asn
                            120
                                                 125
```

Pro Leu Leu Tyr Thr Val Asn Met Ser Ser Arg Leu Cys Ser Leu Leu

```
Met Ala Gly Val Tyr Leu Val Gly Thr Ala Asp Ala Leu Ile His Thr
Thr Leu Thr Phe Arg Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His
                                    170
                165
Phe Phe Cys Asp Val Pro Pro Leu Leu Leu Ile Ser Cys Ser Asp Thr
            180
                                185
Glu Val Asn Glu Leu Ala Ile Phe Thr Ile Phe Gly Phe Ile Glu Leu
                            200
Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser
                        215
Val Leu Lys Ile Gly Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ala Val Ala Val Phe Gln Gly Thr Met Leu
                                    250
Phe Met Tyr Phe Arg Pro Ser Ser Ala Tyr Ser Leu Asp Gln Asp Lys
                                265
Met Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Val Val Lys Leu
                        295
Lys Asn Lys Trp
305
```

<210> 1596 <211> 314 <212> PRT

<213> Mus musculus

<400> 1596

Met Glu Asn Ser Thr Ser Val Asp Glu Phe Leu Leu Gly Leu Thr Ser Val Gln Lys Leu Gln Pro Ile Ile Phe Val Met Phe Leu Thr Ile 20 Tyr Leu Leu Asn Leu Val Gly Asn Gly Val Ile Leu Met Ile Val Thr Leu Glu Arg Arg Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu 55 Ser Cys Leu Asp Ile Cys Tyr Ser Ser Val Thr Leu Pro Lys Val Leu 70 75 Ile Asn Leu Leu Ser Arg Arg Ala Ile Ser Phe Leu Gly Cys Ile 90 Thr Gln Leu Tyr Phe Phe His Phe Leu Gly Ser Thr Glu Ala Ile Leu 100 105 Leu Ala Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Ser Pro Leu 115 120 Arg Tyr Thr Ala Ile Met Asn Pro Gln Leu Cys Ile Leu Leu Ala Ala 130 135 Thr Ala Trp Phe Thr Ser Phe Phe Tyr Ala Leu Leu His Ser Val Met 150 155 Thr Ala His Leu Asn Phe Cys His Ser His Lys Leu Ser His Phe Phe 165 170 Cys Asp Val Lys Pro Leu Leu Glu Val Ala Cys Gly Asn Thr Val Leu 180 185 Asn Gln Trp Leu Leu Ser Val Val Thr Gly Ser Ile Ser Met Gly Ala 195 200 205 Phe Leu Leu Ile Leu Leu Ser Tyr Phe Tyr Ile Ile Ala Phe Leu Leu 215 220 Phe Lys Asn Arg Ser Cys Arg Met Leu Lys Lys Ala Leu Ser Thr Cys

```
225
                    230
Thr Ser His Phe Met Val Val Cys Leu Phe Tyr Gly Pro Val Gly Phe
                                    250
Thr Tyr Ile Arg Pro Ala Thr Ala Ser Ala Ser Ser Met Ser Glu Asp
            260
                                265
Arg Val Val Ala Ile Ile Tyr Ser Ala Val Thr Pro Val Leu Asn Pro
                            280
Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Met Leu Ala Leu Lys Lys
                        295
Asn Phe Gly Lys Lys Leu Phe Lys Gly Asn
                    310
<210> 1597
<211> 308
<212> PRT
<213> Mus musculus
<400> 1597
Met Ser Asn Gln Thr Ser Val Thr Glu Phe Leu Leu Gly Val Thr
                5
                                    10
Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Ile Phe Phe Thr Ile
                                25
Tyr Phe Ile Asn Ile Thr Gly Asn Gly Ala Ile Leu Met Ile Val Ile
                            40
Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu
                        55
Ala Cys Leu Asp Ile Ser Tyr Ser Thr Val Thr Val Pro Lys Leu Leu
                    70
                                        75
Gln Asn Leu Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys Ile
                                    90
               8.5
Thr Gln Leu His Phe Phe His Phe Leu Gly Ser Thr Glu Thr Met Leu
                                105
            100
                                                    110
Leu Pro Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro Leu
                            120
                                                125
His Tyr Ser Val Ile Met Asn His Gln Leu Cys Ile His Met Thr Val
   130
                        135
                                            140
Thr Ile Trp Thr Leu Gly Phe Phe His Ala Leu Leu His Ser Val Met
                    150
                                        155
Thr Ser Arg Leu Ser Phe Cys Gly Pro Asn His Val His His Phe Phe
                165
                                    170
Cys Asp Ile Lys Pro Leu Leu Asp Leu Ala Cys Gly Asn Thr Glu Leu
            180
                                185
                                                    190
Asn Leu Trp Leu Leu Asn Thr Val Thr Gly Thr Ile Ala Leu Thr Ser
       195
                            200
Phe Phe Leu Ile Phe Leu Ser Tyr Phe Tyr Ile Ile Thr Asn Leu Leu
                        215
                                            220
Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr Cys
                    230
                                        235
Ala Ser His Phe Met Val Val Leu Phe Tyr Ala Pro Val Leu Phe
                245
                                    250
Thr Tyr Ile Arg Pro Ala Ser Gly Ser Ser Leu Asp Gln Asp Thr Ile
            260
                                265
Ile Ala Ile Met Tyr Ser Val Val Thr Pro Ala Leu Asn Pro Leu Ile
Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser Ala Leu Asn Arg Lys Val
Arg Arg Trp Leu
305
```

```
<210> 1598
<211> 313
<212> PRT
<213> Mus musculus
<400> 1598
Met Leu Asn Gln Thr Ser Val Thr Glu Phe Ile Leu Leu Gly Val Arg
Asp Ile Gln Glu Pro Gln Pro Phe Leu Phe Ala Ile Phe Phe Thr Ile
            20
                                25
Tyr Phe Val Asn Ile Thr Gly Asn Gly Ala Ile Leu Met Ile Val Ile
Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu
Ala Cys Leu Asp Ile Ser Tyr Ser Thr Val Thr Val Pro Lys Met Leu
                    70
Glu Asn Leu Leu Ser Thr Asn Lys Ala Ile Ser Leu Leu Gly Cys Ile
                                    90
                                                         95
Thr Gln Leu His Phe Phe His Phe Leu Gly Thr Thr Glu Ser Leu Leu
            100
                                105
Leu Ala Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro Leu
                            120
                                                125
His Tyr Ser Val Ile Met Asn Trp Gln Val Cys Ile Leu Met Ala Val
                        135
Thr Ile Trp Thr Ile Ala Phe Leu His Ala Leu Leu His Ser Val Met
                    150
                                        155
Thr Ser Arg Leu Ser Phe Cys Gly Leu Asn His Ile His His Phe Phe
                165
                                    170
Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu Leu
            180
                                185
Asn Leu Trp Leu Leu Asn Thr Val Thr Gly Thr Ile Ala Ser Val Pro
        195
                            200
Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Ile Thr Tyr Leu Phe
                        215
                                            220
Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr Cys
                    230
                                        235
Ala Ser His Phe Met Val Val Leu Phe Tyr Ala Pro Val Leu Phe
                245
                                    250
Thr Tyr Ile Arg Pro Thr Ser Gly Ser Ser Leu Asp Gln Asp Arg Ile
                                                     270
            260
                                265
Ile Ala Ile Met Tyr Ser Val Val Thr Pro Ala Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser Ala Leu Asn Arg Lys Val
                        295
Arg Arg Cys Leu Leu Leu Glu Glu Ile
<210> 1599
<211> 312
<212> PRT
<213> Mus musculus
<400> 1599
Met Ala Leu Ile Asn Lys Ser His Pro Glu Glu Phe Ile Leu Leu Gly
                                    10
Phe Ala Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Ile Ile Leu Leu
```

```
Val Thr Tyr Pro Thr Ala Met Ile Gly Asn Ile Ala Ile Ile Leu Val
                            40
Ser Ile Leu Asp Pro Cys Leu His Ser Pro Met Tyr Phe Phe Leu Thr
                        55
                                            60
Asn Leu Ser Phe Leu Asp Met Cys Tyr Thr Thr Ser Ile Val Pro Gln
                    70
                                         75
Met Leu Thr Asn Leu Gly Ser Ser Thr Lys Thr Ile Ser Tyr Met Arg
                                    90
Cys Val Val Gln Leu Tyr Phe Phe His Ile Met Gly Gly Thr Glu Cys
                                105
Val Leu Leu Ala Leu Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Lys
Pro Leu His Tyr Thr Leu Ile Met Asn Gln Arg Asn Cys Ile Leu Leu
Val Ser Thr Val Trp Leu Thr Gly Ile Ser Tyr Ala Val Ser Glu Ala
                    150
                                         155
Thr Val Thr Leu Gln Leu Pro Leu Cys Gly His Asn Lys Leu Asp His
                                    170
                165
Leu Val Cys Glu Ile Pro Ile Leu Ile Lys Thr Ala Cys Gly Glu Lys
                                185
                                                     190
Glu Thr Asn Glu Leu Ala Leu Ser Val Val Cys Ile Phe Leu Leu Ala
                            200
Val Pro Leu Cys Leu Ile Leu Ala Ser Tyr Ala Ser Ile Gly His Ala
Val Phe Lys Ile Lys Ser Ser Glu Gly Arg Lys Lys Ala Phe Gly Thr
                    230
                                         235
Cys Ser Ser His Leu Ile Val Val Leu Leu Phe Tyr Gly Pro Ala Ile
                                     250
Ser Met Tyr Leu Gln Pro Pro Ser Ser Ile Thr Lys Asp Gln Pro Lys
                                265
Phe Met Ala Leu Phe Tyr Gly Val Val Thr Pro Thr Leu Asn Pro Phe
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Asn Leu
Phe Lys Asn Ile Phe Met Ser Lys
                    310
<210> 1600
<211> 312
<212> PRT
<213> Mus musculus
<400> 1600
Met Ile Leu Ile Asn Lys Ser His Pro Glu Glu Phe Ile Leu Leu Gly
Phe Ala Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Ile Ile Leu Leu
Val Thr Tyr Pro Thr Ala Met Ile Gly Asn Ile Ala Ile Ile Leu Val
        35
                            40
Ser Ile Leu Asp Pro Cys Leu His Ser Pro Met Tyr Phe Phe Leu Thr
                                            60
Asn Leu Ser Phe Leu Asp Met Cys Tyr Thr Thr Ser Ile Val Pro Gln
```

Met Leu Ile Asn Leu Trp Gly Ser Thr Lys Thr Ile Ser Tyr Met Arg

Cys Ala Val Gln Leu Tyr Phe Phe His Thr Met Gly Gly Thr Glu Cys
100 105 110

90

70

```
Val Leu Leu Ala Leu Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Thr Leu Ile Met Asn Gln Arg Asn Cys Val Leu Leu
Val Ser Thr Val Trp Leu Thr Gly Ile Phe Tyr Ala Val Ser Glu Ala
                                        155
                    150
Thr Val Thr Leu Gln Leu Pro Leu Cys Gly His Asn Lys Met Asp His
                                    170
Leu Val Cys Glu Ile Pro Ile Leu Ile Lys Thr Ala Cys Gly Glu Lys
                                185
Glu Thr Asn Glu Leu Ala Leu Ser Val Val Cys Ile Phe Leu Leu Ala
                            200
Ile Pro Leu Cys Leu Ile Leu Ala Ser Tyr Ala Ser Ile Gly His Ala
                        215
Val Phe Lys Ile Lys Ser Ser Glu Gly Arg Lys Lys Ala Phe Gly Thr
                    230
                                        235
Cys Ser Ser His Leu Ile Val Val Leu Leu Phe Tyr Gly Pro Ala Ile
                                    250
Ser Met Tyr Leu Gln Pro Pro Ser Ser Ile Thr Lys Asp Gln Pro Lys
                                265
Phe Met Ala Leu Phe Tyr Gly Val Val Thr Pro Thr Leu Asn Pro Phe
                            280
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Lys Leu
                        295
Phe Arg Asn Ile Phe Ile Ser Lys
```

<210> 1601

<211> 314

<212> PRT

<213> Mus musculus

<400> 1601

Met Asp Asp Met Thr Ser Gly Asn Tyr Cys Thr Val Thr Glu Phe Phe Leu Ala Gly Leu Ser Glu Lys Pro Glu Leu Gln Leu Pro Leu Phe Phe 25 Leu Phe Ile Gly Ile Tyr Met Ile Thr Val Ala Gly Asn Leu Gly Met Ile Ile Leu Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr 55 Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val 75 Thr Pro Lys Met Leu Val Asn Phe Val Thr Glu Lys Asn Ile Ile Ser 90 Tyr Pro Gly Cys Met Thr Gln Leu Tyr Phe Phe Leu Ile Phe Ala Ile 105 Ala Glu Cys Tyr Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala 115 120 125 Ile Cys Asn Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr 130 135 Ile Ser Leu Ile Ser Gly Val Tyr Ile Ile Gly Val Ile Cys Ala Ser 150 155 Ala His Thr Gly Phe Met Val Arg Ile Arg Phe Cys Lys Leu Asp Val 165 170 Ile Asn His Tyr Phe Cys Asp Leu Leu Pro Leu Lys Leu Ala Cys 180 185 Ser Asn Thr Tyr Ile Asn Glu Met Leu Ile Leu Phe Phe Gly Thr Leu

```
195
                            200
Asn Ile Phe Val Pro Ile Leu Thr Ile Ile Thr Ser Tyr Ile Phe Ile
                        215
                                             220
Ile Ala Ser Ile Leu Arg Ile Arg Ser Thr Glu Gly Arg Ser Lys Ala
                    230
                                         235
Phe Ser Thr Cys Ser Ser His Ile Leu Ala Val Ala Val Phe Phe Gly
                                     250
Ser Leu Ala Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp
                                 265
Gln Gly Lys Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu
        275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Ala Val Ala Leu
Lys Lys Ile Ile Glu Arg Lys Thr Phe Met
                    310
<210> 1602
<211> 305
<212> PRT
<213> Mus musculus
<400> 1602
Met Ala Ala Gly Asn Arg Cys Thr Val Thr Glu Phe Phe Leu Val Gly
Leu Ser Glu Lys Ser Glu Leu Gln Leu Pro Leu Phe Leu Phe Thr
Gly Ile Tyr Leu Ile Thr Val Ala Gly Asn Leu Gly Met Ile Thr Leu
Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                        5.5
Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val Ile Pro Lys
                    70
                                         75
Met Leu Met Ser Phe Leu Thr Glu Lys Asn Ile Ile Ser Tyr Ser Gly
                                    90
Cys Met Ala Gln Leu Tyr Phe Phe Leu Ile Phe Gly Ile Ala Glu Cys
                                105
                                                     110
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                 125
Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr Ser Ser Leu
                                             140
Ile Ser Gly Ile Tyr Ile Phe Ala Val Phe Cys Ser Ser Leu Asn Thr
                    150
                                        155
Gly Phe Met Leu Arg Thr Gln Phe Cys Asn Leu Asp Val Ile Asn His
                                    170
                                                         175
Tyr Phe Cys Asp Leu Leu Pro Leu Leu Asn Leu Ala Ser Ser Asn Thr
            180
                                                     190
Phe Ile Ile Glu Ile Leu Ile Leu Val Ile Ala Thr Leu Asn Val Phe
                            200
Ile Pro Val Leu Thr Ile Ile Thr Ser Tyr Ile Phe Ile Ile Ala Thr
                        215
Ile Leu Cys Ile His Ser Arg Glu Gly Lys Phe Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Tyr Gly Ser Gly Ala
                245
                                    250
                                                         255
Phe Thr Tyr Leu Gln Pro Ser Ser Leu Asn Ser Met Gly Gln Ala Lys
            260
                                265
                                                     270
Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Leu
```

280

285

```
Ile Tyr Ser Leu Arg Asn Lys Gly Cys Gln Tyr Phe Ile Glu Glu Asn
                                             300
Thr
305
<210> 1603
<211> 310
<212> PRT
<213> Mus musculus
<400> 1603
Met Arg Asn Cys Thr Leu Val Thr Glu Phe Ile Leu Val Gly Ile Pro
Tyr Thr Ala Gly Leu Glu Arg Met Leu Phe Val Leu Phe Leu Ser Phe
Tyr Leu Leu Thr Leu Pro Gly Asn Leu Leu Ile Leu Met Ala Ile Leu
Thr Ser Ala Ser Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu
Ser Val Leu Asp Ile Phe Phe Pro Ser Val Ser Ser Pro Lys Met Met
                    70
                                        75
Leu Ser Leu Thr Gly His Ser His Thr Ile Ser Tyr Gln Gly Cys Ala
                                     90
                                                         95
Ser Gln Leu Phe Phe Tyr His Phe Leu Gly Cys Ala Glu Cys Phe Leu
                                 105
                                                     110
Tyr Thr Val Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys His Pro Leu
                            120
                                                 125
Arg Tyr Thr Val Ile Met Ser Ser Trp Val Cys Gly Ser Met Ala Val
                        135
                                            140
Ala Thr Trp Met Gly Ser Cys Leu His Ala Ser Val Leu Thr Phe Leu
                                        155
                    150
Ile Phe Lys Leu Pro Tyr Cys Gly Pro Asn Glu Val Asp Asn Phe Phe
                165
                                     170
                                                         175
Cys Asp Ile Pro Val Val Leu Pro Leu Ala Cys Ala Asp Thr Ser Leu
                                185
                                                     190
            180
Ala Gln Ala Val Ser Phe Ile Asn Val Gly Leu Val Ala Leu Val Cys
                            200
                                                 205
Phe Leu Leu Ile Leu Ile Ser Tyr Ser Arg Ile Val Ile Ser Ile Leu
                        215
                                             220
Lys Ile Arg Ser Ser Glu Gly Arg Arg Arg Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ala His Leu Thr Ser Ile Leu Leu Phe Tyr Gly Pro Val Val Leu Ile
                245
                                     250
Tyr Leu Arg Pro Ala Ser Ser Pro Trp Leu Asp Ser Val Val Gln Val
                                265
            260
                                                     270
Leu Asn Asn Ile Val Thr Pro Ser Leu Asn Pro Leu Ile Tyr Ser Leu
                            280
                                                 285
Arg Asn Lys Glu Val Lys Val Ala Leu Arg Lys Ala Leu Thr Gln Gly
                        295
                                             300
Met Arg Val Pro Gly Glu
305
                    310
<210> 1604
<211> 315
<212> PRT
<213> Mus musculus
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```
<400> 1604
Met Thr Pro Gly Met Val Ser Glu Asn Asn Ser Ser Val Lys Glu Phe
                                    10
Ile Leu Leu Gly Leu Thr Gln Leu Pro Glu Leu Gln Leu Pro Leu Phe
                                25
Phe Leu Phe Leu Gly Ile Tyr Val Phe Ser Met Val Gly Asn Leu Gly
Leu Ile Val Leu Ile Val Leu Asn Pro Pro Leu His Thr Pro Met Tyr
                        55
Tyr Phe Leu Phe Asn Leu Ser Phe Thr Asp Leu Cys Tyr Ser Ser Val
                    70
Ile Thr Pro Lys Met Leu Val Gly Phe Val Lys Gln Asn Ile Ile Ser
                                     90
His Ala Glu Cys Met Thr Gln Leu Phe Phe Phe Ala Phe Phe Val Ile
                                105
Asp Glu Cys Cys Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala
       115
                            120
                                                 125
Ile Cys Lys Pro Leu Leu Tyr Lys Val Ile Met Ser His Gln Val Cys
                                            140
Phe Val Leu Met Val Gly Gly Tyr Thr Val Gly Phe Val Gly Ala Thr
                    150
                                         155
Ala His Thr Val Cys Met Leu Arg Leu Thr Phe Cys Asp Gly Asn Ile
                                    170
Ile Asn His Tyr Met Cys Asp Ile Pro Pro Leu Leu Lys Leu Ser Cys
                                185
                                                     190
Thr Ser Thr Ser Ile Asn Glu Leu Val Val Phe Ile Val Val Gly Val
                            200
Ser Ile Ile Val Pro Ser Leu Thr Val Phe Ile Ser Tyr Thr Leu Ile
                        215
Leu Ser Asn Ile Leu Arg Ile His Ser Ala Lys Gly Arg Ser Lys Ala
                    230
                                        235
Leu Ser Thr Cys Ser Ser His Met Ile Ala Val Ser Leu Phe Phe Gly
                                    250
Ser Ser Ser Phe Ile Tyr Phe Lys Ser Ser Pro Val Gly Ser Val Asp
Lys Asp Lys Ile Ser Thr Val Phe Tyr Thr Val Val Val Pro Met Met
        275
                            280
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Gln Ile Ala Leu
                        295
Arg Lys Thr Leu Lys Lys Asn Cys Ser Leu Lys
                    310
<210> 1605
<211> 311
<212> PRT
<213> Mus musculus
<400> 1605
Met Leu Lys Gly Asn Leu Ser Glu Val Thr Glu Phe Ile Leu Ala Gly
Leu Thr Asn Lys Pro Glu Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu
                                25
Ala Ile Tyr Val Val Thr Val Val Gly Asn Leu Gly Met Ile Thr Leu
        35
                            40
Ile Leu Phe Ser Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Thr Val Ile Ile Pro Lys
```

70

```
Met Leu Val Asn Phe Val Thr Val Lys Asn Ile Ile Ser Tyr Pro Glu
Cys Met Thr Gln Leu Tyr Phe Phe Val Thr Phe Ala Ile Ala Glu Cys
                                105
His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Gly Asn
                            120
Pro Leu Leu Tyr Asn Ile Met Met Ser Tyr Arg Val Cys Ser Trp Met
                        135
Ile Phe Gly Val Tyr Ile Met Ala Phe Ile Gly Ala Thr Ser His Thr
                                        155
Val Cys Met Leu Arg Val His Phe Cys Lys Thr Asp Val Ile Asn His
                165
                                    170
Tyr Phe Cys Asp Ile Tyr Pro Leu Leu Glu Leu Ser Cys Ser Asp Thr
                                185
            180
Phe Ile Asn Glu Val Val Leu Leu Cys Phe Ser Val Phe Asn Phe Leu
                            200
Ile Pro Thr Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Ala Ser
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Phe Gly Ser Thr Ala
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Val Asn Ser Met Asp Gln Gly Lys
Val Ser Ser Val Phe Tyr Ser Ile Val Val Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Asn Lys Phe
                        295
Phe Glu Arg Lys Phe Phe Leu
```

<210> 1606

<211> 311

<212> PRT

<213> Mus musculus

<400> 1606

Met Gly Lys Glu Asn His Thr Glu Leu Ser Gln Phe Leu Leu Gly Leu Ser Asp Asp Pro Lys Leu Gln Pro Ile Leu Phe Gly Ile Phe Leu 20 Phe Met Tyr Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala Val Ser Ser Asp Ser His Leu His Asn Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Val Asp Met Cys Phe Thr Ser Thr Thr Val Pro Lys 70 75 Met Leu Val Asn Ile Gln Thr Lys Asn Lys Asn Ile Ser Tyr Met Gln 90 Cys Leu Thr Gln Val Tyr Phe Phe Met Val Phe Ala Gly Met Asp Asn 100 105 Phe Leu Leu Thr Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys His 120 Pro Leu Asn Tyr Thr Val Ile Met Asn Pro His Phe Cys Cys Phe Leu 135 140 Val Leu Met Cys Trp Ile Ile Ile Leu Ser Val Ser Leu Phe His Ser 150 155 Leu Leu Met Lys Gln Leu Thr Phe Ser Met Gly Thr Glu Ile Pro His

```
165
                                    170
Phe Phe Cys Glu Leu Ala Gln Ile Leu Arq Val Ala Ser Ser Asp Ile
                                185
Leu Ile Asn Asn Ile Ala Leu Tyr Val Ala Thr Ala Leu Leu Cys Val
                            200
        195
Phe Pro Val Thr Gly Ile Leu Phe Ser Tyr Ser Gln Ile Val Ser Ser
                        215
Leu Leu Asn Met Ser Ser Val Val Ser Lys Tyr Arg Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Cys Val Val Cys Leu Phe Tyr Gly Thr Ala Leu
                                    250
Gly Val Tyr Leu Ser Ser Ala Gly Thr Asp Val Ser Gln Gly Ser Thr
            260
                                265
Ile Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Val Arg Ile
                        295
Leu Lys Val Tyr Ser Cys Pro
<210> 1607
<211> 317
<212> PRT
<213> Mus musculus
<400> 1607
Met Asp Lys Asn Asn Gln Thr Phe Val Ser Glu Phe Leu Leu Gly
                                    10
Leu Ala Gly Tyr Pro Lys Thr Glu Ile Ile Tyr Phe Val Ile Val Leu
                                25
Val Met Tyr Leu Val Ile Leu Thr Gly Asn Gly Val Leu Ile Ile Ala
                            40
Ser Ile Phe Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly
                        55
Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val Pro Ser
                    70
                                        75
Thr Leu Val Ser Leu Ile Ser Lys Lys Arg Asn Ile Ser Phe Ser Gly
                                    90
Cys Ala Val Gln Met Phe Phe Gly Phe Ala Met Gly Ser Thr Glu Cys
                                105
Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Arg Tyr Ser Ile Ile Met Ser Lys Glu Val Tyr Val Phe Met
                        135
                                            140
Ala Ser Ala Ser Trp Phe Ser Gly Ser Ile Asn Ser Val Val Gln Thr
                    150
                                        155
Ser Leu Ala Met Arg Leu Pro Phe Cys Gly Asn Asn Val Ile Asn His
                                    170
Phe Thr Cys Glu Val Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Ile
                                185
                                                    190
Ser Leu Asn Ile Ile Thr Met Val Ile Ser Asn Met Ala Phe Leu Val
                            200
Leu Pro Leu Leu Val Ile Phe Phe Ser Tyr Leu Phe Ile Leu His Thr
Ile Leu Arg Met Asn Ser Ala Thr Gly Arg Arg Lys Ala Phe Ser Thr
                                        235
                    230
Cys Ser Ala His Leu Thr Val Val Ile Ile Phe Tyr Gly Thr Ile Phe
                                    250
```

Ser Met Tyr Ala Lys Pro Lys Ser Gln Asp Leu Thr Gly Gln Asp Lys Phe Gln Thr Ser Asp Lys Ile Ile Ser Leu Phe Tyr Gly Val Val Thr 285 280 Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys 295 Ala Ala Val Lys Tyr Ile Leu Lys Gln Lys Tyr Val Pro 310 <210> 1608 <211> 311 <212> PRT <213> Mus musculus <400> 1608 Met Glu Cys Lys Arg Asn Ile Ser Glu Phe Leu Leu Met Gly Leu Ser Ser Lys Arg Asn Ile Glu Val Phe Cys Phe Leu Phe Phe Ser Phe Cys Tyr Leu Ala Ile Leu Cys Gly Asn Leu Leu Ile Leu Ile Ser Ile Arg Cys Ser Ser Leu Phe Asn Gln Pro Met Tyr Tyr Phe Leu Ser His Leu Ser Ser Met Asp Ile Phe Tyr Thr Ser Cys Val Thr Pro Lys Leu Ile Gly Asp Leu Leu Val Arg Arg Lys Thr Ile Ser Tyr Thr Asn Cys Met Leu Gln Val Phe Ala Met His Phe Phe Gly Met Ile Glu Ile Leu Ile 105 Leu Thr Ala Met Ala Phe Asp Arg Cys Val Ala Ile Cys Lys Pro Leu 120 His Tyr Met Val Ile Met Ser Arg Ser Arg Cys His Ile Leu Ile Trp 140 Ala Ser Trp Val Gly Gly Ala Ala His Ser Leu Ser Gln Phe Cys Leu 150 155 Leu Ile Cys Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Tyr 170 175 Cys Asp Ile Phe Pro Leu Leu Lys Val Ala Cys Thr Asp Thr Thr Ile 190 Thr Gly Val Leu Val Val Ala Asn Ser Gly Leu Ile Ala Leu Val Thr Phe Val Val Leu Phe Gly Ser Tyr Val Val Ile Leu Phe Thr Leu Arg 220 Asn Tyr Ser Ala Glu Gly Arg His Lys Ala Leu Ser Thr Cys Ala Ser 230 235 His Ile Thr Val Val Ile Leu Phe Phe Gly Pro Ser Ile Phe Ala Tyr 250 Leu Arg Pro Pro Thr Thr Phe Pro Glu Asp Lys Ile Phe Ala Leu Phe 260 265 Tyr Thr Ile Ile Ala Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg 280 285 Asn Thr Glu Met Lys Lys Ala Met Lys Lys Val Trp Cys Gln Asn Met

295

310

300

Phe Ser Glu Glu Lys His Ser

```
<400> 1609
Met Leu Gly Leu Asn Gly Thr Pro Phe Gln Pro Ala Thr Leu Gln Leu
Thr Gly Ile Pro Gly Met Asn Ile Gly Gln Ala Trp Ile Ala Leu Ile
                                 25
Phe Cys Phe Leu Tyr Phe Ile Ser Ile Ala Gly Asn Leu Ser Ile Leu
        35
                            40
Ala Leu Val Ile Arg Glu Pro Pro Leu His Gln Pro Met Tyr Tyr Phe
                        55
Leu Ser Met Leu Ser Leu Asn Asp Leu Gly Val Ser Leu Ser Thr Leu
                    70
Pro Thr Val Leu Ala Thr Phe Cys Phe Asn Tyr Arg His Val Asp Phe
                                     90
Asp Ala Cys Leu Val Gln Met Phe Phe Ile His Thr Phe Ser Phe Met
                                 105
Glu Ser Gly Ile Leu Leu Ala Met Ser Phe Asp Arg Phe Val Ala Ile
                            120
Cys Asp Pro Leu Arg Tyr Ser Thr Val Leu Thr Asn Ser Arg Ile Leu
                        135
Ala Met Gly Leu Gly Ile Leu Ala Lys Ser Phe Thr Thr Leu Phe Pro
                    150
                                         155
Phe Pro Phe Leu Val Lys Arg Leu Pro Phe Cys Lys Gly Asn Val Leu
                                     170
His His Ser Tyr Cys Leu His Pro Asp Leu Met Lys Val Ala Cys Gly
            180
                                185
Asp Ile His Val Asn Asn Ile Tyr Gly Leu Phe Val Val Ile Phe Thr
                            200
                                                 205
Tyr Gly Val Asp Ser Val Phe Ile Leu Leu Ser Tyr Ala Leu Ile Leu
    210
                        215
                                             220
Arg Ala Val Leu Val Ile Ala Ser His Glu Gln Arg Leu Lys Ala Leu
225
                    230
                                         235
Asn Thr Cys Ile Ser His Ile Cys Ala Val Leu Ala Phe Tyr Val Pro
                                     250
Ile Ile Ala Val Ser Met Ile His Arg Phe Trp Lys Ser Ala Pro Ala
                                 265
                                                     270
Val Val His Val Met Met Ser Asn Val Tyr Leu Phe Val Pro Pro Met
        275
                            280
Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Glu Ile Arg Lys Gly
                        295
                                             300
Met Leu Lys Val Phe His Lys Ser Gln Thr
305
                    310
<210> 1610
<211> 314
<212> PRT
<213> Mus musculus
<400> 1610
Met Ala Gly Asn Ala Thr His His Ile Ala Ser Phe Phe Leu Val Gly
                                    10
Ile Pro Gly Leu Glu Asn Phe His Cys Trp Ile Gly Ile Pro Val Cys
                                25
            20
Leu Leu Phe Ala Leu Thr Leu Leu Gly Asn Ser Ile Ile Leu Thr Thr
```

<211> 314 <212> PRT

<213> Mus musculus

```
Val Lys Leu Glu Pro Ser Leu His Gln Pro Met Tyr Phe Phe Leu Cys
Met Leu Ala Met Asn Asp Met Cys Leu Thr Cys Ser Thr Ala Leu Lys
                    70
                                                            80
Met Leu Gly Ile Phe Trp Phe Asp Glu His Trp Ile Asn Phe Asp Ala
Cys Leu Thr Gln Met Phe Phe Ile His Thr Leu Cys Ile Met Glu Ser
                                105
Ala Ile Leu Val Ala Met Ala Phe Asp Arg Phe Val Ala Ile Cys Ile
                            120
Pro Leu His Tyr Thr Ser Ile Leu Thr Met Pro Met Val Ile Lys Ile
                                            140
Gly Leu Val Gly Leu Gly Arg Ala Ile Leu Met Ile Met Pro Cys Pro
                    150
                                        155
Leu Leu Ile Lys Arg Leu Leu Tyr Tyr Thr Lys Tyr Val Ile His His
                                    170
Ala Tyr Cys Glu His Met Ala Val Lys Met Ala Ser Gly Asn Thr
                                185
                                                    190
Gln Val Asn Arg Ile Tyr Gly Ile Leu Val Ala Leu Ser Val Thr Ile
                            200
Phe Asp Leu Gly Leu Ile Val Thr Ser Tyr Ile Lys Ile Leu Gln Ala
                        215
Val Phe Arg Leu Ser Ser Gln Asn Ala Arg Ser Lys Ala Leu Gly Thr
                    230
                                        235
Cys Val Ala His Val Cys Thr Ile Leu Ala Phe Tyr Thr Pro Ala Leu
                                    250
Phe Ser Phe Leu Thr His Arg Phe Gly Lys Asn Val Pro Ala Ser Ile
                                265
His Ile Ile Phe Ala Ile Leu Tyr Leu Leu Val Ser Pro Thr Val Asn
Pro Leu Val Tyr Gly Ala Lys Thr Lys Gln Ile Arg Asp Arg Val Val
                        295
                                            300
Ser Leu Leu Phe Ser Gln Lys Gln Lys Phe
```

```
<210> 1611
```

<400> 1611

Met Leu Ile Phe Asn His Ser Ser Phe Met Thr Phe Thr Leu Leu Gly Val Pro Gly Leu Glu Ser Gln His Leu Trp Leu Ser Val Pro Phe Thr Ser Met Leu Leu Ala Ile Leu Ile Gly Asn Gly Ala Ile Leu Phe Leu Val Ile Thr Glu Pro Thr Leu His Thr Pro Met Tyr Leu Leu Ala 55 60 Leu Leu Met Val Ala Asp Leu Ile Ser Thr Leu Ala Leu Val Pro Lys 70 80 Val Leu Cys Leu Phe Trp Phe Asp Asp Arg Val Ile Ala Ile Tyr Ala 90 Cys Phe Thr Gln Met Phe Phe Ile His Gly Ala Ser Val Val Arg Ser 105 100 110 Ala Leu Leu Val Ala Met Ala Phe Asp Arg Phe Val Ala Val Cys Glu 120 Pro Leu Arg Tyr Asn Thr Ile Leu Ser His Ser Leu Val Gly Arg Leu

<211> 308

<212> PRT

<213> Mus musculus

```
135
                                            140
Gly Leu Val Ala Leu Ala Lys Gly Val Ile Leu Ile Leu Pro Met Pro
                    150
                                        155
Leu Leu Leu Gln Arg Leu Thr Phe Cys His Arg Val Ile Pro His Thr
                165
                                    170
Tyr Cys Asp His Met Ala Val Val Lys Met Ala Cys Ser Asn Thr Arg
            180
                                185
Pro Asn Arg Ile Tyr Gly Leu Phe Val Ile Leu Leu Val Val Gly Leu
        195
                            200
Asn Leu Leu Ile Gly Phe Ser Tyr Val Phe Ile Leu Gln Ser Val
                        215
                                            220
Val Arg Leu Asn Ser Arg Asp Ala Thr Phe Lys Ala Leu Asn Thr Cys
                    230
                                        235
Ser Ala His Leu Phe Val Ile Leu Ile Thr Tyr Val Pro Ala Leu Phe
                245
                                    250
Ser Ser Ile Thr His Arg Ile Gly His His Ile Pro Pro His Ala His
                                265
Ile Ile Leu Ala Asn Leu Tyr Leu Leu Ile Pro Ser Val Phe Asn Pro
                            280
Ile Ile Tyr Gly Ile Lys Met Lys Glu Ile Arg Asp Arg Val Ala Lys
                                            300
Cys Leu Cys Arg
305
<210> 1612
<211> 308
<212> PRT
<213> Mus musculus
<400> 1612
Met Thr Asn Phe Thr His Val Ser Glu Phe Ile Leu Leu Gly Phe Lys
Gly Gly Pro Gly Ile Gln Met Leu Leu Phe Leu Ile Phe Leu Phe Leu
Tyr Val Ile Ala Val Val Gly Asn Phe Gly Met Ile Ile Ile Arg
Met Asp Ala His Leu His Thr Pro Met Tyr Ala Phe Leu Gln Ser Leu
Ser Phe Leu Asp Ile Cys Tyr Ser Ser Thr Ile Ala Pro Arg Ala Leu
                    70
Ile Asn Cys Met Lys Gln Asp His Thr Ile Ser Phe Ser Gly Cys Ala
                                    90
                                                        95
                85
Thr Gln Phe Phe Leu Ser Leu Phe Gly Thr Thr Glu Ala Phe Leu
                                105
Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Asn Pro Leu
                            120
Leu Tyr Ser Val Ser Met Ser His Trp Val Cys Gly Leu Leu Val Ser
                                            140
Gly Ser Tyr Ser Trp Gly Ala Val Asn Ala Val Thr Gln Thr Thr Met
                    150
Thr Phe Thr Leu Thr Phe Cys Gly Ser Asn Glu Ile Asn Asp Phe Phe
                165
                                    170
```

Cys Asp Val Pro Pro Leu Leu Ser Leu Ser Cys Ser Asp Thr Phe Ile

Asn Gln Leu Val Leu Leu Ala Leu Cys Gly Ser Ile Ile Val Ser Thr 200

Phe Leu Thr Val Phe Val Ser Tyr Ile Tyr Ile Ile Ser Thr Ile Leu

215

185

190

205

220

```
Lys Ile Arg Thr Val Gln Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala
Ser His Leu Ile Gly Val Cys Leu Phe Phe Gly Thr Val Phe Phe Met
                245
                                    250
Tyr Ala Gln Pro Ser Ala Val Ser Ser Met Glu Gln Ser Lys Val Val
            260
Ser Ile Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu Ile Tyr
Ser Leu Arg Asn Lys Asp Val Lys Gln Ala Leu Lys Arg Ser Lys Gln
Arg Phe Cys Ser
305
<210> 1613
<211> 311
<212> PRT
<213> Mus musculus
<400> 1613
Met Gln Asn Gln Ser Phe Val Thr Glu Phe Ile Ile Leu Gly Leu Ser
Gln Asn Pro Ile Val Glu Lys Ile Leu Phe Phe Val Leu Leu Val
                                25
Tyr Leu Ala Thr Ile Gly Gly Asn Ile Ile Ile Val Val Thr Ile Met
                            40
Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe
                        55
                                            60
Leu Ser Phe Leu Asp Leu Cys Val Ser Ser Thr Val Thr Pro Lys Met
                    70
                                        75
Ile Val Asp Phe Phe Tyr Glu Lys Lys Thr Ile Ser Phe Gly Cys Cys
               85
                                    90
Met Met Gln Leu Phe Ser Val His Phe Phe Ser Gly Thr Glu Met Ile
```

100 105 Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 125 Leu His Tyr Phe Ser Ile Leu Thr Arg Arg Leu Cys Ser Ile Leu Val 135 140 Ala Ile Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Val Ile 150 155 Phe Thr Leu Gln Leu Pro Leu Cys Gly Pro Asn Val Ile Asp His Tyr 170 165 175 Thr Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His 190 180 185 Ile Phe Val Leu Leu Val Phe Ala Asn Ser Gly Ala Ile Cys Ile Ile 195 200 Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu 215 220 Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly 230 235 Ala His Val Thr Val Val Leu Phe Leu Val Pro Cys Ile Leu Ile 245 250 Tyr Ala Arg Asp Thr Ser Ala Phe Ser Phe Glu Lys His Thr Leu Leu 260 265 270 Phe Val Asn Val Leu Thr Pro Leu Leu Asn Pro Thr Val Tyr Thr Phe 280 285 Arg Asn Lys Glu Met Ile Asn Ala Ile Arg Lys Met Cys Lys Arg Leu Lys Met Ile Phe Val Arg Phe

```
<210> 1614
<211> 320
<212> PRT
<213> Mus musculus
<400> 1614
Met Glu Glu Val Asn Cys Thr Phe Met Ala Glu Phe Ile Leu Leu Gly
                                    10
Phe Ser Asp Val Pro Glu Leu Ala Ile Phe Leu Phe Leu Val Phe Leu
                                25 .
Val Ile Tyr Gly Val Thr Val Ile Ala Asn Leu Gly Met Thr Val Leu
                            40
Ile Gln Val Ser Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ser Phe Val Asp Phe Cys Tyr Ala Ser Ile Ile Val Pro Lys
                    70
                                        75
Met Phe Thr Asp Ile Ile Asn Gln Asp Gln Val Ile Ser Tyr Leu Glu
                                    90
Cys Met Leu Gln Phe Tyr Leu Phe Cys Thr Phe Ala Ile Thr Glu Val
            100
                                105
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Asn
                            120
                                                 125
Pro Leu Leu Tyr Thr Val Ile Met Ser Pro Lys Leu Arg Leu Val Leu
                        135
                                            140
Val Ser Cys Cys Tyr Leu Tyr Ala Ser Val Cys Ser Leu Ile His Leu
                    150
                                        155
Cys Leu Ala Leu Glu Ile Thr Ser Phe Lys Ser Asn Val Ile Asn His
                                    170
                165
Phe Phe Cys Asp Leu Pro Pro Leu Leu Ser Leu Ala Cys Ser Asp Val
            180
                                                     190
                                185
Ser Thr Asn Glu Phe Phe Leu Phe Ile Ile Val Asn Phe Asn Glu Ile
        195
                            200
                                                 205
Leu Thr Ile Val Ile Ile Phe Thr Ser Tyr Leu Phe Ile Leu Ile Thr
                        215
                                            220
Ile Leu Lys Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Ile Met Val Phe His Gly Thr Ile Leu
                245
                                    250
Phe Ile Tyr Cys Gln Pro Asn Ser Gly Asn Ser Leu Asp Val Asp Lys
            260
                                265
Val Thr Thr Val Phe Tyr Thr Val Ile Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Arg Lys Met
                        295
                                             300
Leu Gly Ser Lys Lys Asn Ser Leu Leu Asp Phe Phe Phe Cys Phe
                                        315
<210> 1615
<211> 318
<212> PRT
<213> Mus musculus
<400> 1615
Met Ile Leu Ser Glu Lys Asn Asn Ser Gly Ile Ile Phe Thr Leu Leu
                 5
                                    10
```

```
Gly Phe Ser Asp Tyr Pro Asp Leu Lys Val Pro Leu Phe Leu Val Phe
Leu Val Ile Tyr Ser Ile Thr Val Val Gly Asn Ile Gly Met Ile Leu
                            40
Val Ile Arq Ile Asn Pro Gln Leu His Ser Pro Met Tyr Phe Phe Leu
                        55
Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Ile Ile Ala Pro
Lys Met Leu Val Asn Leu Val Ala Lys Asp Ile Thr Ile Ser Phe Val
                                    90
Glu Cys Ile Val Gln Tyr Phe Leu Phe Cys Val Phe Val Val Thr Glu
                                105
Ala Phe Leu Leu Val Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Lys Leu Cys Ile Thr
Leu Val Val Gly Ser Tyr Ala Trp Gly Phe Thr Cys Ser Leu Thr Leu
                    150
                                        155
Thr Cys Ser Thr Val Gln Leu Ser Phe His Gly Val Asn Arg Ile Asp
                                    170
His Phe Phe Cys Glu Leu Ser Ser Leu Leu Ala Leu Ser Ser Asp
                                185
Thr Leu Ile Ser Gln Leu Leu Phe Val Phe Ala Thr Phe Asn Ala
        195
                            200
Val Ser Thr Leu Leu Leu Ile Leu Leu Ser Tyr Leu Phe Ile Val Val
                        215
Thr Val Leu Lys Met Arg Ser Ala Ser Gly Arg Arg Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ala Ser His Leu Ala Ala Ile Thr Ile Phe His Gly Thr Ile
                                    250
Leu Phe Leu Phe Cys Val Pro Asn Ser Lys Asn Ser Arg Leu Thr Val
Lys Val Gly Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                            280
Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Gln Asp Thr Ile Arg Lys
Ile Met Thr Leu Ile Ser Cys Val Lys Asn Asp Arg His Asn
                    310
```

```
<210> 1616
<211> 317
```

<212> PRT

<213> Mus musculus

<400> 1616

 Met
 Lys
 Ile
 Tyr
 Arg
 Arg
 Met
 Thr
 His
 Gly
 Asn
 Tyr
 Ser
 Leu
 Val
 Thr

 Glu
 Phe
 Ile
 Leu
 Gly
 Leu
 Thr
 Asn
 Arg
 Pro
 Glu
 Leu
 Gln
 Met
 Pro

 Leu
 Phe
 Leu
 Gly
 Ile
 Tyr
 Val
 Val
 Thr
 Ile
 Val
 Asn

 Leu
 Gly
 Leu
 Ile
 Ser
 Leu
 Asn
 Thr
 His
 Leu
 Asn

 Leu
 Gly
 Leu
 Ile
 Ser
 Leu
 Asn
 Thr
 His
 Leu
 Thr
 Pro

 Met
 Tyr
 Tyr
 Phe
 Leu
 Phe
 Asn
 Leu
 Ser
 Phe
 Val
 Asn
 Ile
 Cys
 Tyr
 Ser
 Phe
 Val
 Val
 Val
 Val
 Glu
 Lys
 Asn
 Ser
 Phe

```
100
                                105
Phe Val Ile Thr Glu Cys Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg
                            120
Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Asn Val Ile Leu Ser Pro
                        135
                                            140
Arg Ile Cys Ala Val Phe Val Phe Gly Ala Tyr Val Met Gly Cys Trp
                    150
                                        155
Gly Ser Leu Ala His Thr Leu Cys Met Ala Arg Leu Thr Phe Cys Asp
                165
                                    170
Ala Asn Leu Val Asn His Tyr Leu Cys Asp Ile Leu Pro Val Leu Gln
                                185
Leu Ser Cys Thr Ser Thr Tyr Asn Asn Glu Val Val Phe Val Leu
        195
                            200
Val Gly Met Asn Ile Val Val Ser Thr Ser Thr Thr Phe Ile Ser Tyr
                        215
Gly Phe Ile Ile Ala Asn Ile Leu Arg Ile Ser Ser Thr Gln Asp Arg
                    230
                                        235
Ala Lys Ala Phe Asn Thr Cys Ser Ser His Ile Met Thr Val Ser Leu
                                    250
Phe Phe Gly Ala Ala Ala Phe Met Tyr Met Gln Pro Ser Asp Val Glu
                                265
                                                     270
Ser Met Asp Lys Gly Lys Val Ala Ser Val Phe Tyr Thr Asn Val Gly
        275
                            280
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                        295
Val Ala Leu Lys Lys Thr Leu Lys Arg Lys Leu Phe Ser
                    310
<210> 1617
<211> 308
<212> PRT
<213> Mus musculus
<400> 1617
Met Asn His Ser Ser Val Thr Asp Phe Ile Leu Glu Gly Leu Thr Lys
Arg Pro Glu Leu Gln Leu Pro Leu Phe Leu Phe Leu Gly Ile His
                                25
Val Ile Thr Val Val Gly Asn Leu Gly Met Ile Leu Leu Ile Asn Ile
Ser Ser Gln Leu His Ser Pro Met Tyr Tyr Phe Leu Ser His Leu Ser
Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys Met Leu Val
                    70
Asn Phe Val Cys Ala Lys Asn Thr Ile Ser Phe Lys Glu Cys Met Thr
                                    90
Gln Leu Tyr Phe Phe Leu Leu Leu Ala Ile Ser Glu Gly Tyr Leu Leu
            100
                                105
Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser Pro Leu Leu
        115
                            120
Tyr Asn Thr Val Met Ser His Lys Val Cys Ser Ile Met Met Ala Val
                        135
Val Tyr Ser Leu Gly Phe Phe Gly Ala Thr Val His Thr Thr Arq Met
                    150
                                        155
Thr Met Leu Ser Phe Cys Gly Ser His Ile Ile Arg His Tyr Phe Cys
                165
                                    170
```

Asp Ile Leu Pro Leu Leu Thr Leu Ser Cys Ser Ser Thr His Ile Asn

185

190

```
Glu Val Leu Leu Phe Ile Ile Gly Gly Val Asn Thr Leu Ala Pro Thr
                            200
Leu Ala Val Ile Ile Ser Tyr Ala Phe Ile Leu Thr Ser Ile Leu Arg
                        215
Ile Arg Ser Asn Glu Gly Arg Ser Lys Ala Phe Gly Thr Cys Ser Ser
                    230
His Ile Met Ala Val Gly Ile Phe Phe Gly Ser Ile Thr Phe Met Tyr
                                    250
Phe Lys Pro Pro Ser Ser Asn Asn Met Glu Glu Lys Val Ser Ser
                                265
Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser
       275
                            280
Leu Arg Asn Lys Asp Val Lys Thr Ala Leu Lys Lys Met Val Gly Arg
                        295
                                            300
   290
Arg Gln Leu Ser
305
```

<210> 1618 <211> 316 <212> PRT

<213> Mus musculus

<400> 1618 Met Pro Gly Val Asn Thr Ser Ser Leu Thr Pro Arg Tyr Phe Ile Leu 10 Asn Gly Ile Pro Gly Leu Glu Ala Ala His Ile Trp Ile Ser Leu Pro Phe Phe Ile Met Tyr Leu Ile Ala Val Thr Gly Asn Cys Gly Leu Ile Tyr Leu Ile Ser His Glu Glu Ala Leu His Arg Pro Met Tyr Tyr Phe Leu Ala Met Leu Ser Ala Thr Asp Ile Ser Gly Cys Asn Thr Ile Val 70 75 Pro Ser Met Leu Cys Ile Phe Trp Phe Ser Val Lys Glu Ile Asp Phe 90 85 Asn Ala Cys Leu Val Gln Met Phe Phe Ile His Met Leu Thr Gly Met 100 105 110 Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile 115 120 125 Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asn Thr Met Ile Thr 135 Lys Ile Gly Leu Ala Ala Leu Val Arg Ser Val Leu Leu Met Val Pro 150 155 Phe Ala Phe Leu Ile Lys Arg Leu Pro Tyr Cys Arg Gly Asn Leu Ile 170 Gln His Thr Tyr Cys Asp His Met Ala Val Ala Lys Leu Ser Cys Gly 185 190 180 Asn Ile Lys Ile Asn Ala Ile Tyr Gly Leu Ile Ile Ala Ile Phe Ile 200 205 195 Gly Gly Phe Asp Ile Phe Cys Ile Ser Met Ser Tyr Ala Met Ile Ile 215 220 His Ala Val Val Lys Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe 230 235 Ser Thr Cys Thr Ser His Ile Cys Ala Ile Val Ile Thr Tyr Val Pro 245 250 Ala Phe Phe Asn Phe Phe Thr His Arg Phe Gly Arg Thr Thr Ile Pro 270 265 His His Ile His Ile Ile Ala Asn Leu Tyr Leu Leu Pro Pro

```
275
                            280
Thr Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu
                        295
                                             300
Gly Val Ile Lys Leu Phe Ala Arg Gln Lys Val Val
                    310
<210> 1619
<211> 313
<212> PRT
<213> Mus musculus
<400> 1619
Met Tyr Asn Leu Ser Cys Tyr Asn Pro Ala Ser Phe Thr Leu Val Gly
Ile Pro Gly Leu Glu Lys Phe His Ile Trp Ile Gly Ile Pro Phe Cys
                                25
Val Ile Tyr Val Val Ala Ile Val Gly Asn Cys Ile Leu Leu Tyr Leu
        35
                            40
                                                 45
Ile Ala Val Glu Gln Ser Leu His Glu Pro Met Phe Ile Phe Leu Ser
                        55
Met Leu Ala Ser Thr Asp Leu Ile Leu Ser Thr Ala Thr Val Pro Lys
                    70
                                        75
Leu Leu Ser Asn Leu Trp Phe Gly Ser Gln Glu Ile Thr Phe Ser Gly
                                    90
Cys Leu Thr Gln Met Phe Phe Leu His Phe Ser Phe Val Val Asp Ser
            100
                                105
Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Leu
                            120
                                                 125
Pro Leu Arg Tyr Ser Thr Ile Leu Thr Pro Gln Val Ile Val Lys Ile
                        135
                                            140
Met Val Ser Ile Ile Val Arg Ser Phe Ser Val Ile Leu Pro Asp Val
                    150
                                        155
Phe Leu Leu Arg Arg Leu Pro Phe Cys Lys Thr Arg Val Ile Pro His
                                    170
Thr Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ser Ser Ala Asp Ile
            180
                                185
                                                    190
Ser Ile Asn Ile Trp Tyr Gly Phe Ser Val Pro Leu Met Thr Val Ile
                            200
                                                 205
Ser Asp Val Ile Leu Ile Ala Val Ser Tyr Ile Phe Ile Leu Arg Ala
                        215
                                            220
Val Phe Leu Leu Ser Ser Gln Gly Ala Arg Gln Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Ile Cys Val Ile Leu Met Phe Tyr Thr Pro Ala Phe
                245
                                    250
Phe Ser Ile Leu Ala His Arg Phe Gly His Ser Val Pro Arg Asn Val
                                265
Leu Ile Leu Phe Ala Asn Phe Tyr Val Ala Ile Pro Pro Ala Leu Asn
                            280
Pro Val Val Tyr Gly Val Lys Thr Lys Gln Ile Gln Asp Lys Phe Leu
                        295
Leu Phe Phe Ser Leu Arg Lys Thr Gln
                    310
<210> 1620
<211> 313
```

<212> PRT

<213> Mus musculus

```
Met Thr Ala Leu Ser Val Thr Asn Tyr Thr Ser Ser Arg Phe Ala Leu
Thr Gly Phe Pro Gly Leu Glu Ile Tyr Tyr Phe Trp Ile Ser Val Pro
                                 25
Phe Phe Ile Ile Tyr Val Thr Val Phe Leu Gly Asn Cys Met Val Leu
His Val Ile Arg Thr Glu Leu Ser Leu His Gln Pro Met Phe Tyr Phe
Leu Ala Met Leu Ala Leu Thr Asp Leu Cys Met Gly Leu Ser Thr Val
His Thr Val Met Gly Ile Leu Trp Gly Phe Leu Gln Glu Ile Ser Leu
                                    90
Asp Ala Cys Ile Ala Gln Ser Tyr Phe Ile His Gly Leu Ser Phe Met
                                 105
Glu Ser Ser Val Leu Leu Thr Met Ser Phe Asp Arg Tyr Ile Ala Ile
                            120
Cys Asn Pro Leu Arg Tyr Ser Ser Ile Leu Thr Asn Asp Arg Ile Leu
                        135
                                             140
Lys Ile Gly Val Ala Ile Leu Cys Arg Ser Ser Met Leu Ile Pro Pro
                    150
                                         155
Val Ile Ile Arg Leu Lys Phe Leu Asn Tyr Cys Arg Pro His Phe Leu
                                    170
Ser His Ser Phe Cys Leu His Gln Asp Leu Ile Arg Met Ala Cys Gly
                                185
Asp Ile Arg Phe Asn Ser Ile Tyr Gly Leu Ala Leu Val Ile Ser Asn
                            200
        195
                                                 205
Leu Leu Val Asp Ser Val Leu Ile Leu Ile Ser Tyr Ile Met Ile Leu
                        215
Tyr Thr Val Leu Ser Ile Ala Ser Arg Glu Glu Arg Ile Lys Ser Leu
                    230
                                         235
Gln Thr Cys Val Ser His Ile Ser Ala Val Leu Val Phe Tyr Ile Pro
                245
                                    250
Ile Ile Gly Leu Thr Met Val His Arg Phe Gly Lys His Leu Ser Pro
                                265
Leu Val His Val Leu Met Gly Asn Val Tyr Ile Leu Phe Pro Pro Leu
                            280
Met Asn Pro Ile Ile Tyr Ser Ile Lys Thr Gln Gln Ile Arg Val Arg
                        295
Ile Gln Arg Leu Phe Leu Lys Gly Thr
305
<210> 1621
<211> 310
<212> PRT
<213> Mus musculus
<400> 1621
Met Val Val Thr Asn Gly Ser Leu Val Thr Glu Phe Ile Leu Leu Gly
Leu Thr Asp Asn Pro Asp Leu Gln Ile Pro Leu Phe Leu Val Phe Leu
            20
Val Met Tyr Met Ile Thr Ala Phe Gly Asn Leu Thr Leu Ile Leu Leu
        35
                            40
Thr Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Val Thr Pro Lys
```

<400> 1620

```
70
Leu Leu Met Asn Phe Val Leu Lys Lys Asn Ile Ile Gly Phe Ala Gly
                                    90
Cys Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys
                                105
Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Met Tyr Asn Val Thr Met Ser Pro Lys Val Cys Ser Tyr Leu
                        135
                                            140
Met Leu Gly Ser Tyr Leu Met Gly Phe Ser Asp Ala Met Ile His Thr
                                        155
                    150
Gly Cys Ile Leu Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His
                165
                                    170
Tyr Phe Cys Asp Leu Leu Pro Leu Met Gln Leu Ser Cys Thr Ser Thr
                                185
                                                     190
Tyr Ile Asn Glu Val Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Thr
                            200
        195
Val Pro Ser Ile Val Ile Ile Ile Ser Tyr Gly Phe Ile Leu Ser Asn
                        215
Ile Leu Gln Ile Lys Ser Thr Gly Gly Arg Ser Lys Ala Phe Asn Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Ala
                245
                                    250
Phe Met Tyr Leu Lys Pro Pro Ser Ala Gly Ser Leu Asn Glu Gly Lys
                                265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Arg Lys Thr
                        295
Leu Ser Arg Arg Lys Phe
<210> 1622
<211> 310
<212> PRT
<213> Mus musculus
<400> 1622
Met Val Leu Thr Asn His Ser Leu Val Thr Glu Phe Ile Leu Leu Gly
Leu Thr Asp Asn Pro Asp Leu Gln Ile Pro Leu Phe Leu Val Phe Leu
Val Met Tyr Met Ile Thr Ala Phe Gly Asn Leu Thr Leu Ile Phe Leu
Thr Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Val Thr Pro Lys
                    70
                                        75
                                                             80
Leu Leu Met Asn Phe Val Leu Lys Lys Asn Ile Ile Gly Phe Ala Gly
                85
                                    90
Cys Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys
            100
                                105
Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Met Tyr Asn Val Thr Met Ser Pro Lys Val Cys Ser Tyr Leu
```

135

150

Met Leu Gly Ser Tyr Leu Met Gly Phe Ser Asp Ala Met Ile His Thr

140

```
Gly Cys Ile Leu Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His
                                    170
Tyr Phe Cys Asp Leu Leu Pro Leu Met Gln Leu Ser Cys Thr Ser Thr
            180
                                185
Tyr Ile Asn Glu Val Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Thr
       195
                            200
Val Pro Ser Ile Val Val Phe Ile Ser Tyr Gly Phe Ile Leu Ser Asn
                        215
                                            220
Ile Leu Gln Ile Lys Ser Thr Gly Gly Arg Tyr Lys Ala Phe Asn Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Ala
               245
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Val Gly Ser Leu Asn Glu Gly Lys
            260
                                265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Arg Lys Thr
                    295
Leu Ser Arg Lys Lys Phe
<210> 1623
<211> 311
<212> PRT
<213> Mus musculus
<400> 1623
Met Glu Asn Tyr Thr Arg Val Lys Glu Leu Ile Phe Leu Gly Leu Thr
                                    10
Gln Ser Gln Glu Val Ser Met Val Leu Phe Leu Phe Leu Leu Leu Val
                                25
            20
Tyr Val Thr Thr Leu Leu Gly Asn Leu Leu Ile Met Val Thr Val Thr
                            40
Cys Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg Asn Leu
                        55
                                            60
Ser Val Ala Asp Ile Cys Phe Ser Ser Ile Thr Ala Pro Lys Val Leu
                    70
                                        75
Val Asp Leu Leu Ser Asp Arg Lys Thr Ile Ser Phe Asn Gly Cys Leu
               85
Thr Gln Met Phe Phe His Leu Ile Gly Gly Val Asp Val Phe Ser
                                105
            100
Leu Ser Val Met Ala Leu Asp Arg Tyr Val Ala Ile Ser Lys Pro Leu
                            120
       115
His Tyr Val Thr Ile Met Ser Arg Gly Arg Cys Ile Gly Leu Ile Val
                        135
                                            140
Ala Ser Trp Val Gly Gly Phe Ala His Ser Ile Val Gln Ile Ser Leu
                    150
                                        155
Leu Leu Thr Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Thr Phe Tyr
                165
                                    170
Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys Thr Asp Ile Phe Val
            180
                                185
Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Leu Val Ala Thr Leu Trp
Phe Val Leu Leu Val Val Ser Tyr Thr Val Ile Leu Met Met Leu Arg
```

Ser His Ser Gly Glu Gly Arg Lys Lys Ala Ile Ser Thr Cys Thr Ser

His Ile Thr Val Val Thr Leu His Phe Val Pro Cys Ile Tyr Val Tyr

```
245
                                    250
Ala Arg Pro Phe Thr Ala Leu Pro Thr Asp Lys Ala Ile Ser Val Thr
            260
                                265
                                                    270
Phe Thr Val Ile Ser Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Gln Glu Met Lys Ser Ala Met Arg Arg Leu Arg Lys Arg Leu Glu
                        295
Pro Phe Asp Arg Glu Glu Gln
<210> 1624
<211> 314
<212> PRT
<213> Mus musculus
<400> 1624
Met Gly Lys Ser Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
Gln Asp Pro Ala Gly Arg Lys Ala Leu Phe Val Met Phe Leu Leu Ile
                                25
Tyr Ile Val Thr Met Val Gly Asn Leu Leu Ile Val Glu Thr Val Ile
                            40
Ser Ser Pro Ser Leu Asp Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Phe Ser Pro Lys Leu Ile
                                        75
Met Asp Leu Cys Asn Arg Arg Thr Ile Ser Val Ser Ala Cys Ile
                8.5
Gly Gln Leu Phe Val Glu His Leu Phe Gly Gly Ala Glu Val Phe Leu
                                105
Leu Val Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Met Thr Ile Met Asn Arg Gln Val Cys Ile Leu Leu Val
                        135
                                            140
Ala Ala Cys Ala Gly Gly Phe Gly His Ser Leu Val Gln Val Ile Val
                    150
                                        155
Val Cys Tyr Leu Pro Phe Cys Gly Pro Asn Thr Ile Asp His Phe Ile
                                    170
Cys Asp Met Tyr Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Leu
                                185
                                                    190
Ile Gly Leu Thr Val Val Ala Asn Gly Gly Ala Ile Cys Met Thr Val
                            200
Phe Ile Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                                            220
Ser His Ser Glu Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Ile Ile Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                                    250
Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Ser Leu Thr Val Val
                                265
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Ala Glu Met Lys Asn Ser Met Lys Lys Leu Trp Cys Glu Arg Leu
                        295
                                            300
Thr Met Glu Arg Leu Arg Met Phe Pro His
                    310
```

```
<210> 1625
<211> 312
<212> PRT
<213> Mus musculus
<400> 1625
Met Ala Val Thr Asn Glu Ser His Pro Lys Glu Phe Ile Leu Leu Gly
                                    10
Phe Ala Asn His Pro Trp Leu Glu Leu Pro Leu Phe Val Thr Leu Leu
            20
Ile Thr Tyr Pro Met Ala Leu Met Gly Asn Ile Ala Ile Ile Leu Val
        35
Ser Thr Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Thr
                                             60
                        55
Asn Leu Ser Phe Leu Asp Met Cys Tyr Thr Thr Ser Ile Val Pro Gln
                    70
                                         75
Met Leu Phe Asn Leu Gly Ser Ser Arg Lys Thr Ile Thr Tyr Ile Gly
                                    90
Cys Val Val Gln Leu Tyr Val Phe His Ile Met Gly Gly Thr Glu Cys
                                105
Leu Leu Leu Ala Ile Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Thr Leu Ile Met Asn Gln Arg Val Cys Ile Leu Leu
                        135
                                             140
Val Ser Ile Met Trp Leu Thr Gly Val Ile Phe Ala Phe Ser Glu Ala
                    150
                                         155
Thr Leu Thr Leu Gln Leu Pro Leu Cys Gly Ile His Lys Leu Asp His
                                    170
Leu Leu Cys Glu Ile Pro Val Leu Ile Lys Thr Ala Cys Gly Glu Lys
            180
                                185
                                                     190
Glu Ser Asn Glu Leu Ala Leu Ser Val Val Cys Ile Phe Ile Leu Ala
        195
                            200
                                                205
Val Pro Leu Cys Leu Ile Leu Ala Ser Tyr Val Asn Ile Gly Cys Ala
                        215
                                             220
Val Leu Arg Ile Lys Ser Ser Glu Gly Arg Lys Lys Ala Phe Gly Thr
                    230
                                         235
Cys Ser Ser His Leu Val Val Ser Leu Phe Tyr Gly Pro Ala Ile
                245
                                    250
Ser Met Tyr Leu Gln Pro Ser Ser Ser Ile Thr Arg Asp Gln Pro Lys
            260
                                265
                                                     270
Phe Met Ala Leu Phe Tyr Ala Val Ile Thr Pro Thr Leu Asn Pro Phe
                            280
                                                285
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys Leu
   290
                        295
                                            300
Leu Arg Ser Ile Phe Ser Ser Lys
305
                    310
<210> 1626
<211> 313
<212> PRT
<213> Mus musculus
<400> 1626
Met Met Gln Ile Thr Met Glu Asn Lys Ser Ser Val Ser Glu Phe Ile
                5
                                    10
Leu Met Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro Leu Phe Val
                                25
```

Leu Phe Leu Met Asn Tyr Thr Ala Thr Val Met Gly Asn Leu Thr Leu

```
Met Asn Leu Ile Cys Leu Asn Ser Asn Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Met Val Phe
                    70
                                         75
Thr Pro Lys Met Leu Met Ser Phe Ile Leu Glu Lys Asn Thr Ile Ser
                                     90
Phe Gly Gly Cys Met Ala Gln Leu Phe Phe Leu Phe Phe Val Asn
                                105
Ser Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                 125
Ile Cys Lys Pro Leu Thr Tyr Lys Val Ile Met Ser Pro Lys Ile Cys
    130
                        135
Cys Leu Leu Ile Phe Ser Ser Tyr Leu Met Gly Phe Ala Ser Ala Met
                    150
                                         155
Ala His Thr Gly Cys Met Ile Arg Leu Ser Phe Cys Asp Ser Asn Ile
                165
                                    170
Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Pro Leu Ser Cys
            180
                                185
                                                     190
Ser Ser Thr Tyr Val Asn Glu Leu Met Ser Ser Val Val Val Gly Ser
        195
                            200
Ala Ile Ile Leu Cys Cys Leu Ile Ile Leu Ile Ser Tyr Ala Met Ile
                        215
                                             220
Leu Phe Asn Ile Ile His Met Ser Ser Gly Lys Gly Trp Ser Lys Ala
                    230
                                         235
Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly
                245
                                     250
Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala Lys Thr Val Gly
                                 265
Gln Gly Lys Phe Phe Ser Val Phe Tyr Thr Leu Leu Val Pro Met Leu
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Val
                        295
                                             300
Lys Lys Thr Trp Lys Arg Ile Thr Ser
                    310
<210> 1627
<211> 310
<212> PRT
<213> Mus musculus
<400> 1627
Met Ala Leu Glu Asn Ala Ser Leu Val Thr Glu Phe Ile Leu Met Gly
                 5
                                     10
Leu Thr Asn Arg Pro Asp Leu Gln Ile Pro Leu Phe Leu Leu Phe Leu
            20
                                                     30
Val Met Tyr Val Ile Ala Thr Leu Gly Asn Leu Ala Leu Ile Met Leu
        35
                            40
Ile Ile Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu
                        55
                                            60
Asn Leu Ser Cys Ile Asp Leu Phe Tyr Cys Ser Val Ile Thr Pro Lys
                    70
                                        75
Met Leu Met Asn Phe Val Leu Lys Lys Asn Val Ile Ser Tyr Glu Gly
                                    90
Cys Met Ala Gln Phe Tyr Phe Phe Ala Phe Phe Ala Ile Ser Glu Cys
            100
                                105
Tyr Val Leu Thr Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
```

120

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Pro Leu Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys Ser Tyr Leu
Met Met Gly Thr Tyr Leu Met Gly Phe Ser Gly Ala Met Ile His Thr
                    150
Gly Cys Ile Leu Arg Leu Thr Phe Cys Asp Lys Asn Thr Ile Asn His
                165
                                    170
Tyr Phe Cys Asp Ile Leu Pro Leu Leu Gln Ile Ser Cys Thr Ser Thr
                                185
                                                    190
Tyr Val Asn Glu Ile Glu Leu Phe Ile Val Ala Gly Lys Asp Ile Ile
        195
                            200
Val Pro Thr Val Ile Ile Phe Thr Ser Tyr Gly Phe Ile Leu Ser Ser
                        215
Ile Leu Lys Ile Ser Ser Thr Ala Gly Met Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Leu Cys Leu Phe Phe Gly Ser Cys Thr
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Val Glu Ser Met Asp Gln Gly Lys
                                265
Ile Ser Ser Val Phe Tyr Asn Ile Val Val Pro Leu Met Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Ile Lys Lys Thr
                        295
Ile Thr Ile Gly Lys Phe
<210> 1628
<211> 310
<212> PRT
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<213> Mus musculus

<400> 1628

Met Gly Phe Glu Asn Gly Ser Ser Val Thr Glu Phe Ile Leu Val Gly 10 Leu Thr Lys Glu Ser Asp Leu Gln Cys Pro Leu Phe Ile Leu Phe Leu 25 Met Met Tyr Val Val Thr Val Leu Gly Asn Gln Gly Leu Ile Ser Leu 40 Ile Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe 55 Asn Leu Ser Phe Val Asp Leu Trp Tyr Ser Ser Val Phe Thr Pro Lys 70 75 Met Leu Glu Ser Phe Ile Ser Glu Lys Asn Thr Ile Ser Tyr Arg Gly 90 Cys Met Ala Gln Leu Phe Phe Phe Cys Phe Phe Ser Ile Ser Glu Cys 100 105 110 Tyr Ile Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys Leu Ile Leu 135 140 Met Phe Ser Ser Tyr Met Met Ala Phe Ser Gly Ala Met Ala His Thr 150 155 Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile Asn His 165 170 Tyr Phe Cys Asp Ile Leu Pro Val Met Gln Leu Ser Cys Thr Ser Thr 185 190 Tyr Val Asn Glu Leu Glu Val Phe Val Val Val Gly Ile Asn Ile Ile 200 Val Pro Thr Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Ile Ser Ser

```
210
                        215
                                            220
Ile Phe Arg Ile Ser Ser Lys Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala
                245
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Ala Glu Ser Met Asn Glu Gly Lys
                                265
Ile Ser Ser Ile Phe Tyr Thr Asn Thr Val Pro Leu Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu Ile Lys Thr
                        295
                                             300
Leu Ser Lys Arg Lys Arg
                    310
<210> 1629
<211> 311
<212> PRT
<213> Mus musculus
<400> 1629
Met Ala Phe Gly Asn Arg Ser Phe Val Thr Glu Phe Ile Leu Ile Gly
                                    10
Leu Thr Asp Gln Pro Asn Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu
                                25
Val Met Tyr Ile Val Thr Met Thr Gly Asn Leu Gly Leu Val Ile Leu
Ile Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                        55
                                             60
Asn Leu Ser Leu Ile Asp Leu Cys Tyr Ser Ser Val Phe Thr Pro Lys
                    70
                                        75
Met Leu Leu Asn Phe Ile Leu Asn Lys Asn Ile Ile Ser Tyr Thr Gly
                                    90
Cys Met Thr Gln Leu Tyr Phe Tyr Ser Phe Phe Val Ile Ser Glu Cys
            100
                                105
                                                     110
Tyr Val Leu Met Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Asn Ile Ala Met Thr Pro Lys Ile Cys Ser Tyr Leu
                        135
                                             140
Met Leu Gly Ser Tyr Leu Met Ala Phe Ser Gly Ala Met Ala His Thr
                                        155
                    150
Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile Asn His
                                    170
                165
Tyr Phe Cys Asp Ile Leu Pro Val Met Gln Leu Ser Cys Thr Ser Thr
            180
                                185
                                                    190
Tyr Val Asn Glu Leu Glu Val Phe Ile Val Val Gly Ile Asn Ile Leu
                            200
                                                 205
Val Pro Ser Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser
                        215
                                             220
Ile Phe His Ile Asn Ser Asn Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala
                                                         255
                245
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Ala Gly Ser Met Asp Glu Gly Lys
            260
                                265
                                                    270
Ile Ser Ser Val Phe Tyr Thr Asn Val Val Pro Met Met Asn Pro Leu
       275
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Ile Thr
                                            300
    290
                        295
```

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305
<210> 1630
<211> 309
<212> PRT
<213> Mus musculus
<400> 1630
Met Asp Ser Val Asn Val Ser Leu Val Thr Glu Phe Leu Leu Val Gly
Leu Thr His Gln Pro Asp Leu Gln Ile Pro Leu Phe Leu Phe Leu
Ala Met Tyr Leu Val Thr Ala Leu Gly Asn Leu Gly Leu Ile Ile Leu
        35
Val Leu Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                        55
Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Ser Val Phe Ala Pro Lys
                    70
                                        75
Met Leu Met Asn Phe Ile Leu Arg Gln Asn Ala Ile Ser Tyr Met Gln
                                    90
Cys Met Thr Gln Leu Tyr Phe Phe Phe Phe Phe Val Val Ser Glu Cys
            100
                                105
Phe Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Phe Leu Tyr Asn Val Met Ile Ser Pro Gln Val Cys Leu Asn Leu
                        135
                                            140
Met Ile Gly Ser Tyr Leu Met Ala Phe Ser Glu Ala Val Val Leu Thr
                    150
                                        155
Val Cys Met Leu Thr Leu Thr Phe Cys Asp Gly Asn Ile Asn His Tyr
                                    170
                                                        175
Phe Cys Asp Ile Leu Ala Leu Phe Gln Leu Ser Cys Ser Ser Thr Tyr
            180
                                185
                                                    190
Val Asn Lys Leu Val Ala Tyr Val Ile Val Val Ile Asn Ile Leu Phe
        195
                            200
Ser Thr Pro Ala Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser Ile
                        215
                                            220
Phe Arg Ile Ser Ser Ser Lys Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Arg Ala Phe
                245
                                    250
Val Tyr Phe Lys Pro Ser Ser Pro Gly Ser Met Glu Trp Ala Lys Ile
            260
                                265
Ser Ser Val Phe Tyr Thr Asn Val Val Pro Met Met Asn Pro Leu Ile
                            280
Tyr Ser Leu Lys Asn Lys Asp Val Lys Ile Ala Leu Arg Lys Ser Leu
Ala Arg Trp Lys Ile
305
<210> 1631
<211> 310
<212> PRT
<213> Mus musculus
<400> 1631
Met Ala Pro Ala Asn Val Ser Leu Val Thr Glu Phe Ile Leu Val Gly
```

Leu Ser Arg Trp Lys Leu Leu

```
Leu Thr Asn Gln Pro Asp Leu Gln Ile Pro Leu Phe Phe Val Phe Leu
                                25
Ile Met Tyr Ile Val Thr Ala Leu Gly Asn Leu Cys Leu Ile Ile Leu
        35
                            40
Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                        55
                                            60
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val Phe Thr Pro Lys
                    70
                                        75
                                                             80
Met Leu Met Asn Phe Ile Leu Ser Lys Asn Ala Ile Ser Tyr Met Gly
                                    90
Cys Leu Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys
                                105
Tyr Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Thr Val Ala Met Ser Pro Lys Leu Cys Leu Asn Leu
                        135
                                            140
Met Leu Gly Thr Tyr Ala Met Ala Phe Ser Gly Ala Met Ala His Thr
                    150
                                        155
Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile Asn His
                                    170
Tyr Phe Cys Asp Ile Leu Pro Val Met Gln Leu Ser Cys Thr Ser Thr
            180
                                185
Tyr Val Asn Glu Leu Val Val Phe Ile Val Val Gly Ile Asn Ile Ile
                            200
                                                 205
Val Pro Ser Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser
                        215
Ile Phe His Ile Lys Ser Asn Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Val Cys Leu Phe Phe Gly Ser Gly Ala
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Ser Ser Ser Met Asp Gln Gly Lys
Thr Ser Ser Val Phe Tyr Thr Asn Val Val Pro Met Met Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Arg Lys Thr
                        295
Leu Ser Arg Trp Lys Phe
<210> 1632
<211> 310
<212> PRT
<213> Mus musculus
<400> 1632
Met Glu Lys Ala Val Leu Ile Asn Glu Thr Ser Val Met Ser Phe Arg
                5
                                    10
Leu Thr Gly Leu Ser Thr Asn Pro Leu Val Gln Met Ala Val Phe Phe
Ile Phe Leu Ile Phe Tyr Val Leu Thr Leu Val Gly Asn Ile Leu Ile
                            40
Val Ile Thr Ile Ile Tyr Asp Arg Arg Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ser Asn Leu Ser Phe Ile Asp Val Cys His Ser Thr Val Thr
                   70
                                        75
```

Val Pro Lys Met Leu Ser Asp Thr Phe Ser Glu Glu Lys Leu Ile Ser

90

```
Phe Asp Ala Cys Val Val Gln Met Phe Phe Leu His Leu Phe Ala Cys
Thr Glu Ile Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala
                            120
Ile Cys Lys Pro Leu Gln Tyr Met Thr Ile Met Asn Trp Lys Val Cys
                        1.35
                                            140
Met Met Leu Ala Ala Ala Leu Trp Thr Gly Gly Thr Ile His Ser Ile
                    150
                                        155
Ser Leu Thr Ser Leu Thr Ile Lys Leu Pro Tyr Cys Gly Pro Asp Glu
                165
                                    170
Ile Asp Asn Phe Phe Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys
            180
                                185
                                                    190
Thr Asp Thr His Ile Ile Glu Ile Leu Ile Val Ser Asn Ser Gly Leu
       195
                            200
Ile Ser Val Val Cys Phe Val Val Leu Val Val Ser Tyr Ala Val Ile
                        215
                                            220
Leu Val Ser Leu Arg Gln Gln Ile Ser Asp Gly Lys Arg Lys Ala Leu
                    230
                                        235
Ser Thr Cys Ala Ala His Leu Thr Val Val Thr Leu Phe Leu Gly His
                245
                                    250
Cys Ile Phe Ile Tyr Ser Arg Pro Ser Thr Ser Leu Pro Glu Asp Lys
                                265
Val Val Ser Val Phe Phe Thr Ala Val Thr Pro Leu Leu Asn Pro Ile
        275
                            280
Ile Tyr Thr Leu Arg Asn Glu Asp Met Lys Ser Ala Leu Asn Lys Leu
                       295
Ile Lys Arg Arg Glu Lys
```

<210> 1633

<211> 308

<212> PRT

<213> Mus musculus

<400> 1633

Met Gly Ala Leu Asn Gln Thr Arg Val Thr Glu Phe Ile Phe Leu Gly Leu Thr Asp Asn Trp Val Leu Glu Ile Leu Phe Phe Val Pro Phe Thr Val Thr Tyr Met Leu Thr Leu Leu Gly Asn Phe Leu Ile Val Val Thr 35 Ile Val Phe Thr Pro Arg Leu His Asn Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Ile Asp Ile Cys His Ser Ser Val Thr Val Pro Lys 70 75 Met Leu Glu Gly Leu Leu Glu Arg Lys Thr Ile Ser Phe Asp Asn 90 Cys Ile Ala Gln Leu Phe Phe Leu His Leu Phe Ala Cys Ser Glu Ile 105 Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ile 120 Pro Leu His Tyr Ser Asn Val Met Asn Met Lys Val Cys Val Gln Leu Val Phe Ala Leu Trp Leu Gly Gly Thr Ile His Ser Leu Val Gln Thr 155 Phe Leu Thr Ile Arg Leu Pro Tyr Cys Gly Pro Asn Ile Ile Asp Ser 170 Tyr Phe Cys Asp Val Pro Pro Val Ile Lys Leu Ala Cys Thr Asp Thr

```
180
                                185
Tyr Leu Thr Gly Ile Leu Ile Val Ser Asn Ser Gly Thr Ile Ser Leu
                            200
                                                205
Val Cys Phe Leu Ala Leu Val Thr Ser Tyr Thr Val Ile Leu Phe Ser
                                            220
Leu Arg Lys Lys Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys
                    230
                                        235
Ser Ala His Phe Met Val Val Thr Leu Phe Phe Gly Pro Cys Ile Phe
                                    250
Leu Tyr Thr Arg Pro Asp Ser Ser Phe Ser Ile Asp Lys Val Val Ser
                                265
Val Phe Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr
                            280
Leu Arg Asn Glu Glu Val Lys Thr Ala Met Lys His Leu Arg Gln Arg
                        295
                                            300
Arg Ile Cys Ser
305
<210> 1634
<211> 314
<212> PRT
<213> Mus musculus
<400> 1634
Met Ser Gln Lys Arg Met Ala Pro Arg Asn Ser Ser Ser Val Thr Glu
Phe Ile Leu Val Gly Phe Ser Asn Gln Pro Ala Leu Gln Leu Pro Leu
Phe Phe Val Phe Leu Gly Ile Tyr Val Leu Thr Val Ile Gly Asn Leu
Gly Leu Ile Thr Leu Ile Gly Leu Asn Ser Ser Leu His Thr Pro Met
                        55
Tyr Phe Phe Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Cys
65
                                        75
                                                             80
Val Phe Thr Pro Lys Met Leu Ser Asp Phe Val Ser Glu Asn Ile Ile
                85
                                    90
Ser Tyr Met Gly Cys Met Thr Gln Leu Phe Phe Cys Phe Phe Val
            100
                                105
Asn Ser Glu Cys Tyr Val Leu Val Ser Met Ala Tyr Asp Arg Tyr Val
        115
                            120
Ala Ile Cys Asn Pro Leu Leu Tyr Thr Val Thr Met Ser Pro Gln Val
                        135
Cys Thr Leu Leu Met Phe Cys Ser Tyr Val Ile Gly Phe Ala Gly Ala
                    150
                                         155
Met Ala His Thr Gly Ser Met Leu Thr Leu Thr Phe Cys Asp Ser Asn
                                    170
                165
Met Ile His His Tyr Leu Cys Glu Val Leu Pro Leu Leu Gln Leu Ser
            180
Cys Thr Ser Thr Tyr Ala Asn Glu Leu Val Phe Phe Ile Val Val Gly
        195
                            200
Val Val Ile Thr Ala Ser Ser Ile Ser Ile Phe Ile Ser Tyr Ala Leu
Ile Leu Ser Asn Ile Leu Lys Ile Pro Ser Ala Glu Gly Arg Ser Lys
                                         235
                                                             240
Ala Phe Gly Thr Cys Gly Ser His Val Val Ala Val Ala Leu Phe Phe
                                    250
Gly Ser Gly Ala Phe Thr Tyr Leu Thr Thr Ser Phe Pro Gly Ser Met
```

265

Glu Glu Gly Arg Phe Ala Ser Val Phe Tyr Thr Asn Val Val Pro Met 280 Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala 295 300 Leu Asn Lys Thr Leu Lys Arg Val Leu Phe 310 <210> 1635 <211> 316 <212> PRT <213> Mus musculus <400> 1635 Met Ala Lys Asn Asn Ile Thr Thr Val Thr Glu Phe Ile Leu Ile Gly Phe Asn Asp His Pro Lys Trp Glu Ile Pro Leu Leu Leu Val Phe Leu Ser Phe Tyr Leu Val Thr Met Leu Gly Asn Leu Gly Met Val Ile Leu 40 Ile His Val Asp Val Gln Leu His Ile Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Val Leu Asp Ala Cys Tyr Thr Ser Val Ile Thr Pro Gln 75 Ile Leu Ala Thr Leu Ala Thr Gly Lys Thr Val Ile Ser Tyr Arg Cys 85 90 Cys Ala Ala Gln Phe Phe Phe Thr Ile Cys Ala Ala Thr Glu Cys 105 100 Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn 115 120 125 Pro Leu Leu Tyr Thr Val Ala Met Gly Pro Arg Lys Cys Trp Ser Leu 135 140 Val Val Gly Ala Tyr Ile Cys Gly Val Cys Gly Ala Ile Leu Arg Thr 150 155 Thr Cys Thr Phe Ser Leu Ser Phe Cys Glu Asn Asn Gln Ile Asn Phe 165 170

Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr 180 185 190 Thr Asn Ile Glu Ile Ile Ile Val Phe Phe Gly Asn Phe Val Ile Leu 195 200 Ala Asn Ala Leu Val Ile Leu Ile Ser Tyr Leu Leu Ile Ile Lys Ala 215 220 Val Met Arg Met Lys Ser Ser Gly Arg Arg Ala Lys Thr Phe Ser Thr 230 235 Cys Val Ser His Leu Thr Ala Val Ala Leu Leu Phe Gly Thr Leu Ile 245 250 Phe Met Tyr Ile Arg Ser Gly Ser Lys Ser Leu Asp Glu Asp Lys 265 Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Lys Lys Val 295 Thr Gly Lys Cys Gln Val Ser Gln Cys Thr Gln His

<210> 1636 <211> 314

<212> PRT

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<400> 1636
Met Asp Asn Asn Leu Thr Thr Val Thr Glu Phe Ile Leu Val Gly
                                     10
Phe Thr Asp His Pro Glu Trp Glu Val Pro Leu Phe Leu Val Phe Leu
                                25
Cys Phe Tyr Leu Val Thr Ile Leu Gly Asn Leu Gly Met Val Ile Leu
Ile Gln Met Asp Val Gln Leu Gln Ser Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Val Leu Asp Ala Cys Tyr Thr Ser Val Ile Thr Pro Gln
                    70
                                        75
Ile Leu Ala Met Leu Ala Thr Gly Lys Thr Val Ile Ser Tyr Asn His
Cys Ala Ala Gln Phe Phe Phe Thr Phe Cys Ala Ser Thr Glu Cys
Phe Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Ser Asn
                            120
Pro Leu Leu Tyr Thr Val Ala Met Ser Pro Lys Lys Cys Trp Ser Leu
                        135
                                             140
Val Leu Val Ala Tyr Val Cys Gly Leu Ser Gly Ser Ile Gln Arg Thr
                    150
                                        155
Thr Cys Thr Phe Ser Leu Ser Phe Cys Glu Asp Asn Lys Ile Asn Phe
                                    170
Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr
                                185
                                                     190
Thr Asn Ala Glu Ile Ile Ile Val Leu Phe Gly Asn Phe Val Ile Leu
                            200
Val Asn Ala Leu Val Ile Leu Thr Ser Tyr Leu Leu Ile Ile Lys Thr
                                            220
Val Met Arg Ile Lys Ser Ser Gly Gly Arg Gly Lys Thr Phe Ser Thr
                    230
                                        235
Cys Val Ser His Leu Thr Ala Val Ala Leu Phe Phe Gly Thr Leu Thr
                                     250
Phe Met Tyr Ile Arg Ser Gly Ser Gly Lys Ser Pro Glu Glu Asp Lys
                                265
Val Val Ser Val Phe Tyr Thr Val Ile Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Gly Phe Arg Lys Leu
                        295
Thr Ser Arg Leu Gln Val Ser Gln Ser Val
<210> 1637
<211> 310
<212> PRT
<213> Mus musculus
<400> 1637
Met Lys Asn Gln Ser Gly Glu Leu Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
                                                        15
Asp Asp Pro Gln Leu Gln Ile Leu Ile Phe Leu Phe Leu Phe Phe Asn
            20
Tyr Ile Leu Ser Met Met Gly Asn Leu Thr Ile Ile Leu Leu Thr Leu
                            40
Leu Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
```

```
Ser Phe Ile Glu Ile Ala Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                    70
Ile Ser Ile Leu Ser Gly Asp Arg Thr Ile Ser Tyr Asn Ala Cys Ala
                                    90
Ala Gln Leu Phe Phe Val Phe Leu Leu Gly Ser Thr Glu Phe Tyr Leu
                                105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                            120
                                                125
His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Leu Leu Val Leu
    130
                        135
Ser Ser Trp Val Thr Gly Phe Leu Ile Ile Phe Pro Pro Leu Leu Leu
                    150
                                        155
Gly Leu Lys Leu Asp Phe Cys Thr Ser Gly Ala Met Asp His Phe Leu
                165
                                    170
Cys Asp Pro Ser Pro Val Leu Gln Leu Ser Cys Thr Asp Thr Gln Leu
            180
                                185
Ile Glu Leu Met Thr Phe Val Leu Ala Ile Met Thr Leu Ile Ile Thr
                            200
Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu
    210
                        215
                                            220
Lys Phe Pro Ser Ala Gln Gln Arg Arg Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Val Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met
                                    250
Tyr Val Lys Thr Ser Ala Lys Glu Arg Val Thr Leu Asn Lys Gly Val
                                                    270
                                265
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
        275
                            280
Thr Leu Arg Asn Gln Gln Val Lys Asp Ala Phe Lys His Met Leu His
                        295
                                            300
Arg Phe Cys Thr Lys Gln
305
```

```
<210> 1638
```

<400> 1638

Met Ser Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro Asp Leu Gln Lys Leu Leu Phe Ile Val Cys Leu Ile Ile Tyr Leu Ile 20 30 Thr Leu Ala Gly Asn Met Leu Ile Ser Val Thr Ile Phe Ile Ser Pro 40 Ala Leu Ala Thr Pro Met Tyr Phe Phe Leu Ser Tyr Leu Ser Ile Ile 55 60 Asp Gly Phe Tyr Ser Ser Ser Ile Ala Pro Lys Met Ile Tyr Asp Leu 75 70 Ile Ser Glu Lys Ser Thr Ile Ser Phe Asn Gly Cys Met Thr Gln Leu 90 8.5 Phe Ala Glu His Phe Phe Ala Ala Asp Glu Ile Ile Leu Leu Ile Ala 100 105 Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Met 115 120 125 Thr Ile Met Ser Gln Pro Leu Cys Val Phe Leu Val Gly Ala Ala Val 135 140 Ile Leu Gly Phe Ile His Gly Ala Ile Gln Thr Leu Phe Met Ala Gln

<211> 306

<212> PRT

<213> Mus musculus

```
145
                    150
                                        155
Leu Pro Phe Cys Gly Pro Asn Thr Ile Asn His Phe Met Cys Asp Leu
                                    170
                                                        175
                165
Ile Pro Leu Leu Glu Leu Ala Cys Thr Asp Thr His Thr Leu Gly Pro
                                                     190
            180
                                185
Leu Ile Ala Ala Asn Ser Gly Ser Leu Cys Leu Leu Thr Phe Ser Met
                            200
Leu Val Ala Ser Tyr Val Val Ile Leu Arg Ser Leu Arg Asn His Ser
                        215
Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser His Val Thr
                    230
                                        235
Val Val Leu Phe Phe Val Pro Cys Ser Tyr Leu Tyr Leu Arg Pro
                245
                                    250
Met Thr Ser Phe Pro Thr Asp Lys Ala Val Thr Val Phe Cys Thr Leu
            260
                                265
Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Glu Glu
                            280
Val Lys Arg Val Met Lys Lys Leu Trp Gly Arg Met Arg Lys Ala Gly
                        295
Asp Met
305
<210> 1639
<211> 305
<212> PRT
<213> Mus musculus
<400> 1639
Met Val His Glu Asn Asn Val Thr Glu Leu Ile Phe Thr Gly Leu Phe
Gln Asp Pro Glu Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val
                                25
Tyr Leu Ala Thr Leu Leu Gly Asn Gly Leu Ile Phe Val Thr Val Ser
Ile Ser Lys Thr Leu His Ser Pro Met Tyr Phe Phe Leu Ser Ser Leu
Ser Leu Val Glu Ile Cys Tyr Ser Ser Thr Val Ala Pro Lys Phe Ile
                                        75
Thr Asp Leu Leu Ala Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu
                                    90
                                                         95
Thr Gln Ile Phe Phe Phe His Phe Phe Gly Val Val Glu Ile Ile Leu
            100
                                105
Leu Val Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
His Tyr Met Ile Ile Met Ser Arg Gln Val Cys His Met Leu Val Ala
                        135
Gly Ser Trp Leu Gly Gly Leu Ile His Ser Ile Ile Gln Ile Ile Ile
                    150
Thr Ile Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe
                165
                                    170
                                                         175
Cys Asp Leu His Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Phe Met
                                185
                                                     190
Glu Arg Phe Ile Val Met Ala Asn Ser Gly Leu Phe Ser Ile Ile Ser
                            200
                                                 205
        195
Leu Phe Ile Leu Val Ser Ser Tyr Ala Val Ile Leu Ile Ser Leu Arg
                        215
                                            220
```

Lys Arg Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser

230

```
His Ile Thr Val Val Ile Leu Tyr Phe Gly Pro Gly Ala Phe Ile Tyr
                                     250
Met Arg Pro Ser Ser Ala Phe Thr Glu Asp Lys Leu Val Ser Val Phe
                                 265
            260
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Ile Val Tyr Thr Leu Arg
                            280
                                                 285
Asn Thr Glu Met Lys Asn Ala Ile Arg Met Phe Trp Ser Gln Lys Asp
                        295
                                             300
Lys
305
<210> 1640
<211> 314
<212> PRT
<213> Mus musculus
<400> 1640
Met Gly Glu Arg Asn Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr
Gln Asp Pro Ala Gly Gln Lys Val Leu Phe Val Met Phe Leu Leu Ile
                                 25
Tyr Ile Val Thr Met Val Gly Asn Leu Leu Ile Val Leu Thr Val Ile
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Cys Leu
                        55
Ser Phe Leu Asp Ile Val Tyr Ser Thr Ser Ile Ser Pro Lys Leu Ile
                                         75
                    70
Met Asp Leu Cys Asp Glu Lys Ser Ile Ser Phe Thr Ala Cys Met
                                     90
                                                         95
Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Thr Glu Ile Val Ile
            100
                                 105
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
His Tyr Leu Thr Ile Met Asn Arg Lys Val Cys Ile Ile Leu Leu Gly
                                             140
                        135
Phe Ser Trp Val Gly Gly Phe Thr His Ser Met Ile Gln Ile Leu Phe
                    150
                                         155
Val Phe Asn Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Met
                                     170
                                                         175
Cys Asp Met Ser Pro Leu Leu Gly Leu Val Cys Thr Asp Thr Tyr Phe
                                 185
                                                     190
Ile Gly Leu Thr Leu Ile Ala Lys Gly Gly Ala Met Cys Ile Val Val
                            200
                                                 205
Phe Ile Leu Leu Ile Val Ser Tyr Gly Ile Ile Leu Arg Ser Leu Lys
                                             220
Asn Tyr Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                         235
His Ile Met Val Val Thr Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                245
                                     250
                                                         255
Ala Arg Pro Val Tyr Asn Phe Ser Ser Asp Lys Tyr Ile Thr Val Phe
                                                     270
            260
                                 265
Tyr Thr Val Phe Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                                                 285
                            280
Asn Ser Glu Met Lys Asn Ser Met Gln Lys Leu Trp Cys Thr Leu Leu
                                             300
                        295
Thr Met Asp Arg Ile Arg Leu Ser Cys Tyr
305
                    310
```

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<211> 307
<212> PRT
<213> Mus musculus
<400> 1641
Met Gly Gln Asn Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                     10
Gln Asp Pro Ala Gly Gln Lys Val Leu Phe Val Met Phe Leu Leu Ile
                                 25
Tyr Ile Val Lys Ile Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu
                        55
Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Leu Pro Lys Leu Leu
Thr Asp Leu Leu Cys Asp Lys Lys Thr Ile Ser Phe Thr Ala Cys Leu
                                                         95
                85
                                     90
Val Gln Leu Phe Val Glu His Leu Phe Gly Gly Ser Glu Val Phe Ile
            100
                                 105
Leu Val Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Leu Thr Ile Met Lys Arg Gln Val Cys Ile Leu Leu Val Val
                        135
                                             140
Val Ser Trp Ala Gly Gly Phe Val His Ala Leu Leu Gln Ala Ile Ser
                    150
                                         155
Val Tyr Leu Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ala
                165
                                     170
Cys Asp Ile Tyr Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Phe
            180
                                 185
                                                     190
Leu Gly Leu Thr Val Val Ser Ser Tyr Gly Ala Met Ser Ile Val Ala
        195
                            200
Phe Ile Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                                             220
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
His Ile Met Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Tyr Ile Thr Val Phe
            260
                                                     270
Tyr Thr Val Phe Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                 285
Asn Met Glu Ile Lys Asn Cys Met Ala Lys Leu Trp Ser Lys Met Phe
                                             300
Thr Lys Ala
305
<210> 1642
<211> 315
<212> PRT
<213> Mus musculus
<400> 1642
Met Gly Gln Arg Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
1
                                    10
Gln Asp Pro Ala Gly Gln Lys Ala Leu Phe Val Met Phe Leu Leu Ile
            20
                                 25
                                                     30
```

<210> 1641

```
Tyr Ile Val Thr Met Val Gly Asn Leu Leu Ile Val Ala Thr Val Ile
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu
Ser Ile Met Asp Ala Val Tyr Ser Thr Ser Thr Ser Pro Lys Leu Ile
                                       75
Met Asp Leu Ser Asp Lys Lys Thr Ile Ser Phe Ser Ala Cys Met
Gly Gln Leu Phe Ile Glu His Leu Phe Gly Gly Ala Glu Val Phe Leu
            100
                               105
                                                   110
Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                               125
His Tyr Leu Thr Ile Met Asn Arg Gln Ile Cys Ile Leu Leu Val
                        135
                                           140
Ile Ala Trp Val Gly Gly Phe Val His Ser Val Ile Gln Leu Ala Phe
                    150
                                       155
Val Ser Thr Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
               165
                                   170
Cys Asp Met Tyr Pro Leu Leu Thr Leu Ala Cys Ser Asp Thr Tyr Phe
           180
                               185
                                                   190
Ile Gly Leu Thr Val Val Ala Asn Gly Gly Ala Ile Cys Met Val Ile
       195
                            200
                                               205
Leu Ile Leu Leu Ile Ser Tyr Val Phe Ile Leu Asn Ser Leu Lys
                        215
                                           220
Asn Tyr Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                       235
His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Phe Ile Tyr
               245
                                   250
Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Ser Ile Ser Val Val
           260
                               265
                                                   270
Phe Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
                                               285
Asn Ser Glu Met Lys Ile Ala Met Gln Lys Leu Trp Cys Lys Thr Ala
                       295
Thr Thr Gly Arg Val Arg Val His Ser Pro His
                    310
```

```
<210> 1643
```

<400> 1643

Met Glu Asn Ala Asn Asn Val Thr Glu Phe Ile Leu Val Ser Ile Thr 10 Lys Ile Pro Glu Leu Arg Ile Leu Phe Ser Ala Leu Phe Leu Ile Met 25 Tyr Val Ala Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Thr Val Thr 40 Val Ser Pro Asn Leu Arg Ser Pro Met Tyr Phe Phe Leu Ile Ser Leu 55 Ser Leu Leu Asp Val Ile Tyr Ser Ser Val Thr Ala Pro Lys Leu Ile 70 75 Val Asp Ser Leu Ser Glu Asn Thr Thr Ile Ser Leu Glu Gly Cys Met 90 Thr Gln Leu Phe Ala Glu His Phe Phe Gly Gly Val Glu Ile Ile Leu 105 Leu Ile Val Met Ala Tyr Asp Ser Tyr Val Ala Ile Cys Lys Pro Leu

<211> 305

<212> PRT

<213> Mus musculus

```
120
His Tyr Thr Thr Ile Val Ser Pro Arg Val Cys Trp Leu Met Val Gly
                        135
                                            140
Gly Ala Trp Val Gly Gly Phe Ala His Gly Thr Ile Gln Leu Leu Phe
                    150
                                        155
Met Tyr Gln Ile Pro Phe Cys Gly Pro Asn Val Ile Asp His Val Ile
                165
                                    170
Cys Asp Leu Phe Pro Leu Leu Gln Leu Ala Cys Met Asp Thr His Ile
           180
                                185
                                                    190
Leu Ala Leu Leu Val Ile Leu Asn Ser Gly Val Met Cys Val Thr Ile
                                                205
       195
                            200
Phe Leu Ile Leu Ile Thr Ser Tyr Val Val Ile Leu Cys Ser Leu Lys
                        215
Ser Ser Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Phe Thr Val Val Leu Phe Phe Val Pro Cys Ile Ile Leu Tyr
                245
                                    250
Met Arg Pro Val Val Thr Tyr Pro Ile Asp Asn Ala Met Ala Leu Cys
            260
                                265
Ala Thr Ile Phe Glu Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg
                            280
Asn Ala Glu Val Lys His Ala Leu Arg Lys Leu Trp Met Lys Arg Gly
Pro
305
<210> 1644
<211> 307
<212> PRT
<213> Mus musculus
<400> 1644
Met Gly Glu Lys Ser Asn Ile Thr Glu Phe Ile Leu Leu Gly Leu Thr
1
                                    10
Gln Asp Pro Ala Gly Arg Lys Ile Leu Phe Phe Ile Phe Leu Leu Ile
                                25
Tyr Ile Val Thr Met Val Gly Asn Leu Leu Ile Val Val Thr Val Ile
                            40
                                                45
Thr Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
                        55
Ser Leu Leu Asp Ala Leu Phe Ser Thr Ala Ile Ser Pro Lys Leu Ile
                    70
                                        75
Val Asp Leu Phe Cys Asp Gln Lys Thr Ile Ser Phe Thr Ala Cys Ile
                85
                                    90
Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Val Asp Ile Val Ile
           100
                                105
                                                    110
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Leu Ala Ile Met Asn Arg Arg Val Cys Ile Thr Leu Leu Ile
                        135
                                            140
Ile Ala Trp Thr Gly Gly Phe Thr His Ser Leu Ile Gln Ile Val Phe
                    150
                                        155
Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
                165
                                    170
Cys Asp Met Ser Pro Leu Leu Val Leu Ala Cys Thr Asp Thr Tyr Phe
                                                   .190
```

Ile Gly Leu Thr Val Ile Ala Asn Gly Gly Ala Met Cys Ile Val Ile

```
Phe Thr Leu Leu Gly Ser Tyr Gly Ile Ile Leu Lys Ser Leu Lys
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Ile Leu Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                245
Ala Arg Pro Val Tyr Asn Phe Pro Ile Asp Lys Cys Ile Thr Val Phe
                                265
Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                                                285
                            280
Asn Ser Glu Met Lys Thr Cys Met Lys Lys Leu Trp Cys Lys Ile Leu
                        295
                                            300
Pro Ala Asp
305
<210> 1645
<211> 310
<212> PRT
<213> Mus musculus
<400> 1645
```

Met Ala Leu Ile Asn Gly Ser Val Val Thr Glu Phe Ile Leu Leu Gly 10 Leu Thr Asp Gln Pro Asp Leu Gln Val Pro Leu Phe Leu Val Phe Leu Leu Met Tyr Met Ile Thr Ala Leu Gly Asn Leu Thr Leu Ile Ile Leu **,**35 40 Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe 55 Asn Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Ile Pro Lys 70 75 Met Leu Met Asn Phe Ile Leu Lys Lys Asn Phe Ile Ser Tyr Val Gly 90 8.5 Cys Met Thr Gln Phe Tyr Leu Phe Gly Phe Cys Val Ile Leu Glu Cys 100 105 Tyr Ile Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys Ser Tyr Leu 135 140 Met Leu Gly Ser Tyr Leu Met Gly Phe Ser Gly Ala Met Ile His Thr 150 155 Gly Cys Val Leu Arg Leu Ser Phe Cys Asp Gly Asn Ile Ile Asn His 165 170 175 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr 180 185 190 Tyr Val Asn Glu Ile Glu Val Leu Ile Val Ala Gly Lys Asp Ile Ile 195 200 205 Val Pro Thr Val Ile Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser 220 215 Ile Phe Gln Met Lys Ser Thr Lys Gly Met Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala 250 Phe Met Tyr Leu Lys Pro Asn Ser Thr Gly Thr Met Asn Asn Gly Lys 265 Ile Pro Ser Ile Ile Tyr Thr Ile Leu Ile Pro Met Met Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr

290 295 300 Leu Arg Lys Lys Ile Leu <210> 1646 <211> 316 <212> PRT <213> Mus musculus <400> 1646 Met Ala Leu Ala Asn Gly Ser Phe Val Thr Glu Phe Ile Leu Leu Gly 10 Leu Thr Asp Gln Pro Asp Leu Gln Met Pro Leu Phe Leu Ile Phe Leu 25 Ile Ile Tyr Leu Ile Thr Ala Phe Gly Asn Leu Thr Leu Ile Ile Leu 35 40 Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe 55 Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Leu Ile Thr Pro Lys 70 75 Met Leu Met Asn Phe Val Leu Glu Lys Asn Ile Ile Ser Tyr Met Gly 90 Cys Met Thr Gln Phe Tyr Phe Phe Gly Phe Phe Ala Ile Ser Glu Cys 100 105 110 Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Ser Val Ala Met Ser Pro Lys Met Cys Ser Tyr Leu 135 140 Ile Leu Gly Ser Tyr Phe Met Gly Phe Ser Gly Ala Met Ile His Thr 150 155 Gly Cys Val Met Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His 165 170 175 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr 180 185 190 Tyr Val Asn Glu Ile Glu Leu Phe Ile Val Thr Gly Lys Asp Ile Ile 195 200 205 Val Pro Thr Val Ile Ile Phe Ala Ser Tyr Gly Phe Ile Leu Ser Asn 215 220 Ile Leu Lys Ile Arg Ser Thr Ser Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Ile Ile Ala Val Ser Met Phe Phe Gly Ser Ser Ala 245 250 Phe Met Tyr Leu Lys Pro Ser Ser Ala Val Ser Met Asn Glu Ala Lys 265 Phe Ser Ser Ile Phe Tyr Ser Ile Val Val Pro Met Met Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Gly Leu Lys Lys Thr . 295 300 Leu Ser Arg Met Phe Ser His Asn Leu Ile Ser Leu 310 <210> 1647 <211> 310 <212> PRT

<213> Mus musculus

<400> 1647

```
Met Gly Ser Glu Asn Gly Ser Ser Val Thr Glu Phe Ile Leu Val Gly
Leu Thr Lys Asp Pro Asp Leu Gln Cys Pro Leu Phe Val Leu Phe Leu
Val Met Tyr Val Leu Thr Val Leu Gly Asn Leu Ser Leu Ile Thr Leu
Ile Val Leu Asn Ser His Leu Pro Thr Pro Met Tyr Phe Phe Leu Phe
Asn Leu Ser Leu Val Asp Phe Trp Tyr Ser Ser Val Phe Thr Pro Lys
                    70
Met Leu Met Ser Phe Ile Ser Glu Lys Asn Ile Ile Ser Tyr Arg Gly
                                    90
Cys Met Ala Gln Leu Phe Phe Phe Ser Phe Phe Cys Ile Ser Glu Cys
            100
                                105
Tyr Val Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys Leu Asn Leu
                        135
                                            140
Ile Leu Gly Ser Tyr Ile Met Ala Phe Ser Gly Ala Met Ala His Thr
                    150
                                        155
Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile Asn His
                165
                                    170
Tyr Phe Cys Asp Ile His Pro Leu Leu Gln Leu Ser Cys Thr Ser Ile
            180
                                185
                                                    190
Tyr Val Asn Glu Leu Glu Val Phe Val Val Ile Gly Ile Asn Ile Ile
                            200
Val Pro Thr Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser
                        215
                                            220
Ile Phe His Ile Ser Ser Lys Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Ala Glu Ser Met Asn Glu Ser Lys
Val Ser Ser Val Phe Tyr Thr Asn Thr Val Pro Leu Leu Asn Pro Leu
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Ile Lys Thr
   290
Leu Ser Lys Arg Lys Cys
305
                    310
```

<210> 1648

<211> 310

<212> PRT

<213> Mus musculus

<400> 1648

 Met
 Asp
 Ser
 Val
 Asn
 Ile
 Ser
 Leu
 Val
 Thr
 Glu
 Phe
 Ile
 Leu
 Val
 Gly

 Leu
 Thr
 Asp
 Lys
 Pro
 Tyr
 Leu
 Gln
 Ile
 Pro
 Leu
 Phe
 Phe
 Ile
 Phe
 Leu

 Ala
 Met
 Tyr
 Leu
 Val
 Thr
 Ala
 Leu
 Gly
 Asn
 Leu
 Ser
 Leu
 Ile
 Ile
 Leu

 Thr
 Val
 Leu
 Asn
 Ser
 His
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe
 Phe
 Leu
 Phe

 Thr
 Val
 Asn
 Leu
 His
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe
 P

```
90
Cys Met Ser Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys
                                105
                                                     110
Tyr Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Asn Leu Val Met Ser Ser Lys Leu Cys Leu Asn Leu
                                            140
Met Leu Val Ser Tyr Phe Ile Ala Phe Ser Glu Ser Val Ala His Thr
                    150
                                        155
Val Cys Ile Met Arg Leu Asn Phe Cys Asp Ala Asn Lys Ile Asn His
                                    170
                165
Tyr Phe Cys Asp Ile Pro Pro Leu Leu Gln Leu Ser Cys Thr Thr Thr
            180
                                                     190
Tvr Ile Asn Lys Leu Val Val Phe Val Ala Ser Ser Ile Asn Ile Ile
                            200
        195
Val Pro Ile Ser Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser
                        215
Ile Phe His Ile His Ser Ser Glu Gly Arg Ser Lys Ala Phe Ser Thr
                                         235
                    230
Cys Ser Ser His Ile Ile Ala Ala Phe Leu Phe Phe Gly Ser Gly Ala
                                    250
Phe Met Tyr Phe Gln Pro Ser Ser Ala Glu Ser Met Asp Glu Gly Lys
                                265
Ile Ser Ser Val Phe Tyr Thr Asn Val Ile Pro Met Met Asn Pro Leu
Leu Tyr Ser Leu Arg Asn Lys Asp Ile Lys Val Ala Leu Arg Lys Thr
                        295
Leu Ser Lys Arg Asn Ile
<210> 1649
<211> 308
<212> PRT
<213> Mus musculus
<400> 1649
Met Gly Thr Gly Asn His Ser Ala Ala Val Val Phe Val Leu Val Gly
Leu Thr Gln Gln Pro Glu Leu Leu Pro Leu Phe Ile Leu Phe Leu
Gly Ile Tyr Val Val Thr Ala Val Gly Asn Leu Gly Met Ile Leu Leu
        35
                            40
Ile Thr Val Ser Pro Leu Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
Ser Leu Ser Cys Val Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Lys
                    70
                                        75
                                                             80
Met Leu Val Asn Phe Leu Gly Lys Lys Asn Val Ile Val Tyr Ser Glu
                                    90
Cys Met Ala Gln Leu Phe Phe Phe Val Ile Phe Val Val Ala Glu Gly
                                105
Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
Pro Leu Leu Tyr Asn Val Ile Met Ser Ser Arg Leu Cys Ser Leu Leu
                        135
                                            140
Val Leu Val Ala Phe Ile Leu Gly Phe Val Ser Ala Leu Ala His Thr
                    150
                                        155
Ser Ala Met Met Asn Leu Ser Phe Cys Lys Ser His Ile Ile Ser His
```

```
Tyr Phe Cys Asp Val Leu Pro Leu Leu Asn Leu Ser Cys Ser Asn Thr
           180
                                185
His Leu Asn Glu Leu Leu Phe Ile Ile Gly Gly Phe Asn Thr Leu
       195
                            200
                                                205
Val Pro Thr Leu Ala Val Ala Ile Ser Tyr Val Phe Ile Phe Cys Ser
                        215
Ile Leu His Ile Lys Ser Ser Lys Gly Arg Ser Lys Ser Phe Gly Thr
                    230
                                        235
Cys Ser Ser His Leu Met Ala Val Gly Ile Phe Phe Gly Ser Ile Thr
                                    250
Phe Met Tyr Phe Lys Pro Ser Ser Ser Asn Ser Leu Glu Gln Glu Lys
                                265
Val Ser Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu
       275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Ala Leu Gly Arg Phe
   290
                        295
                                            300
Phe Val Gly Arg
305
```

<210> 1650 <211> 313 <212> PRT <213> Mus musculus

<400> 1650

Met Ala Leu Val Asn Gly Ser Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Gln Pro Gly Leu Gln Met Pro Leu Phe Leu Leu Phe Leu Leu Met Tyr Met Ile Thr Val Phe Gly Asn Leu Thr Leu Ile Phe Leu 35 Ile Leu Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu Asn Leu Ser Phe Val Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys 70 Met Leu Met Asn Phe Ile Leu Lys Lys Asn Leu Ile Ser Tyr Met Gly 90 Cys Met Ser Gln Leu Tyr Phe Phe Cys Phe Phe Ile Ile Ser Glu Cys 105 Tyr Val Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Asn Thr Ala Met Ser Pro Arg Val Cys Ser Tyr Leu 140 Met Leu Gly Ser Tyr Leu Met Gly Phe Phe Asp Ala Met Ile His Thr 150 155 Gly Cys Met Leu Arg Leu Ser Phe Cys Asp Gly Asn Ile Ile Asn His 170 165 Tyr Phe Cys Asp Val Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr 180 185 190 Tyr Val Asn Glu Thr Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Ile 200 205 Leu Pro Ser Ala Ile Ile Phe Phe Ser Tyr Gly Phe Ile Leu Ser Asn 215 220 Ile Phe Gln Ile Arg Ser Thr Leu Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Gly 245 250 Phe Met Tyr Leu Lys Pro Ser Ser Ala Val Ser Ile Asp Gln Gly Lys

Ile Ser Ser Ile Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr Leu Ser Arg Arg Lys Phe Leu Lys Val <210> 1651 <211> 311 <212> PRT <213> Mus musculus <400> 1651 Met Asp Thr Lys Asn Ile Ser Phe Ile Thr Glu Phe Ile Leu Val Gly Leu Thr Glu Tyr Thr Glu Thr His Phe Pro Phe Phe Leu Phe Leu Gly Ile Tyr Ala Ile Thr Val Ala Gly Asn Leu Gly Leu Leu Thr Leu Ile Gly Met Asn Ser Pro Leu His Thr Pro Met Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Lys Leu Leu Val Asn Phe Val Ser Glu Arg Asn Thr Ile Ser Tyr Glu Gly Cys Met Thr Gln Leu Tyr Phe Tyr Cys Phe Phe Val Ser Ala Glu Cys Tyr Val Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Thr Val Thr Met Ser Pro Gln Val Cys Ser Leu Leu Thr Leu Ile Val Tyr Val Gly Ala Phe Ile Gly Ala Trp Ala His Thr Gly Cys Met Met Arg Leu Thr Phe Cys Lys Asp Asn Thr Val Asn His Tyr Met Cys Asp Ile Leu Pro Leu Leu Glu Leu Ser Cys Ser Ser Thr Tyr Ile Asn Glu Leu Val Val Phe Ile Val Val Gly Phe Asp Val Gly Val Pro Ser Ile Thr Ile Val Val Ser Tyr Thr Phe Ile Leu Ser Ser Ile Leu His Ile Arg Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser Ser His Ile Ile Val Val Ser Val Phe Phe Gly Ser Gly Ala Phe Met Tyr Leu His Pro Ser Ser Val Leu Ser Met Asp Gln Gly Lys Val Ser Thr Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu Ile Tyr Ser Phe Arg Asn Lys Glu Val Lys Ile Ala Leu Arg Lys Thr Leu Arg Met Lys Ile Ser Ser

```
55
                                            60
Ser Leu Ala Phe Val Asp Thr Trp Leu Ser Ser Thr Val Thr Pro Lys
                    70
                                        75
                                                             8.0
Met Leu Leu Asp Ile Phe Ser Lys Ser Lys Leu Ile Ser Phe Ser Glu
                                    90
Cys Met Ile Gln Phe Phe Ser Phe Gly Ile Ser Ala Thr Thr Glu Cys
                                105
            100
Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Pro Val Ile Met Thr Asn Arg Leu Cys Val Arg Leu
                        135
                                             140
Leu Thr Leu Ser Phe Val Gly Gly Phe Ile His Val Leu Ile His Glu
                    150
                                        155
Ser Phe Leu Phe Arg Leu Thr Phe Cys Asn Ser Asn Ile Ile His His
                165
                                    170
Phe Tyr Cys Asp Val Met Pro Leu Leu Lys Ile Ser Cys Asn Asp Pro
            180
                                185
Ser Leu Asn Tyr Leu Met Leu Phe Ile Phe Ser Gly Ser Ile Gln Val
        195
                            200
Phe Ser Ile Leu Thr Ile Leu Ile Ser Tyr Thr Leu Val Leu Phe Ser
                        215
Ile Leu Lys Gln Lys Ser Leu Lys Ser Ile Lys Lys Ala Phe Ser Thr
                                        235
                    230
Cys Gly Ala His Leu Leu Ser Val Ser Leu Tyr Tyr Gly Ser Leu Leu
                                     250
                245
Phe Met Tyr Val Arg Pro Ala Ser Pro Gln Val Asp Asp Gln Asp Met
                                265
Met Asp Ser Ile Phe Tyr Thr Val Ile Ile Pro Val Leu Asn Pro Ile
                            280
Ile Tyr Ser Leu Arg Asn Lys Gln Val Lys Asn Ser Leu Glu Lys Phe
Leu Lys Arg Asn Thr
305
<210> 1654
<211> 308
<212> PRT
<213> Mus musculus
<400> 1654
Met Gly Tyr Gly Asn Leu Thr Glu Phe Ile Leu Leu Gly Leu Phe His
Asn Glu Asp Val Lys Ala Ile Cys Ala Val Leu Phe Leu Leu Cys Tyr
Leu Ala Ile Leu Cys Gly Asn Leu Val Val Leu Leu Thr Ile Lys Gly
Ser Gln Leu Ser Glu Gln Pro Met Tyr Phe Phe Leu Ser Tyr Leu Ser
                        55
Phe Met Asp Val Cys Phe Thr Ser Thr Val Ala Pro Lys Phe Ile Ile
                    70
Gly Leu Leu Val Gln Cys Asn Thr Ile Ser Tyr Asn Gly Cys Ile Ala
                                    90
```

Gln Met Phe Tyr Ala His Phe Phe Gly Ala Thr Glu Ile Phe Ile Leu

Tyr Met Ile Thr Met Ser Arg Gln Val Cys Tyr Ile Leu Val Ile Gly

135

105 Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu Tyr 120

125

```
Ser Val Phe Gly Ala Phe Ile His Ser Leu Val His Val Leu Val Ile
145
                    150
                                         155
Ile Arg Leu Pro Phe Cys Gly Ser Asn Glu Ile Asp His Tyr Phe Cys
                165
                                    170
Asp Ile Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Arg Leu Leu
                                185
                                                     190
Val Ile Val Ile Ile Thr Thr Thr Gly Val Met Ser Ile Leu Thr Phe
                            200
                                                 205
Val Ala Leu Val Ile Ser Tyr Ile Ile Ile Leu Ser Ile Leu Arg Thr
                        215
Arg Ser Ser Glu Ser Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser His
                    230
                                         235
Ile Thr Val Val Phe Met Phe Phe Leu Pro Leu Ile Phe Thr Tyr Val
                                     250
                                                         255
                245
Pro Met Gly Asp Ser Val Gly Asp Asp Lys Val Phe Ala Leu Phe Tyr
                                265
            260
Thr Met Ile Ala Pro Leu Phe Asn Pro Leu Ile Tyr Thr Leu Arg Asn
                            280
                                                 285
Thr Asp Met Lys Asn Ala Met Arg Lys Val Trp Cys Gln Asp Lys Leu
                        295
                                             300
Phe Glu Gly Lys
305
```

<210> 1655 <211> 318 <212> PRT

<213> Mus musculus

<400> 1655 Met Lys Asn Gln Ser Leu Glu Val Val Phe Val Leu Leu Gly Leu Thr Gly Asp Pro Gln Leu Gln Ile Leu Ile Phe Leu Phe Leu Phe Phe Asn 25 Tyr Ile Leu Ser Leu Met Gly Asn Leu Val Ile Ile Leu Leu Thr Leu Leu Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 50 55 Ser Phe Leu Glu Ile Ala Phe Thr Thr Val Cys Ile Pro Arg Phe Leu 70 75 Thr Ser Ile Leu Leu Gly Glu Lys Met Ile Leu Tyr Asn Ala Cys Val 90 Ala Gln Leu Phe Phe Phe Leu Leu Gly Ala Thr Glu Phe Tyr Leu 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu 120 125 His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Leu Leu Val Leu 130 140 135 Ser Ser Trp Val Thr Gly Phe Phe Val Ile Leu Pro Pro Leu Leu Leu 150 155 Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Thr Val Asp His Phe Leu 165 170 Cys Asp Thr Ser Val Leu Gln Leu Ser Cys Thr Asp Thr Arg Leu Ile 180 185 190 Glu Leu Met Ala Phe Ala Leu Ala Ile Met Thr Leu Ile Ile Thr Leu 200 195 205 Ile Leu Val Leu Phe Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu Lys 215 220 Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser

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225
                    230
                                        235
His Met Val Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met Tyr
                245
                                    250
Val Lys Thr Ser Ala Lys Glu Arg Val Thr Leu Asn Lys Gly Ile Ala
                                265
                                                    270
Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr Thr
                            280
Leu Arg Asn Gln Gln Val Lys Glu Ala Phe Lys Asn Val Ile His Arg
                        295
                                             300
Phe Cys Ser Phe Lys Asn His Glu Thr Arg Phe Arg His Gln
                    310
<210> 1656
<211> 310
<212> PRT
<213> Mus musculus
<400> 1656
Met Arg Asn His Thr Thr Val Thr Val Phe Ile Leu Leu Gly Leu Thr
                                    10
Asp Asp Leu Gln Leu Gln Val Val Phe Val Leu Leu Phe Leu Thr
Tyr Met Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu
Leu Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
Ser Phe Leu Glu Ile Ser Phe Thr Thr Val Cys Ile Pro Lys Phe Leu
                    70
                                        75
Val Ser Met Ala Thr Gly Asp Lys Thr Ile Ser Tyr Asn Glu Cys Ala
                                                         95
Ala Gln Leu Phe Phe Thr Ile Leu Leu Gly Ala Thr Glu Phe Phe Leu
                                105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Met Thr Ile Met Ser Ser Lys Ile Cys Asn Leu Leu Val Phe
                        135
                                             140
Val Ser Trp Leu Ser Gly Phe Leu Ile Ile Phe Pro Pro Leu Leu Met
                    150
                                        155
Gly Leu Gln Leu Asp Phe Cys Ala Ala Asn Thr Val Asp His Phe Phe
                                    170
Cys Asp Val Ser Pro Ile Leu Gln Leu Ser Cys Thr Asp Thr His Ile
                                                     190
Ile Glu Leu Met Met Leu Leu Ser Ala Ile Leu Thr Leu Leu Val Thr
                            200
Leu Val Leu Val Ser Leu Ser Tyr Thr Asn Ile Ile Arg Thr Ile Leu
                        215
Arg Ile Pro Ser Ser Gln Gln Arg Arg Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Val Val Val Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                245
                                    250
Tyr Val Lys Pro Ser Ala Lys Glu Arg Val Ala Leu Asn Lys Gly Ile
            260
                                265
                                                    270
Ala Leu Leu Ser Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr
        275
                            280
Thr Leu Arg Asn Lys Gln Val Lys Asp Ala Phe Lys Asn Met Thr Lys
                        295
                                            300
Arg Trp Ser Phe Tyr Gln
305
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<211> 310
<212> PRT
<213> Mus musculus
<400> 1657
Met Glu Ala Glu Asn His Thr Thr Val Ala Glu Leu Ile Ile Leu Gly
Leu Thr Glu Asp Pro Lys Leu Cys Ile Val Phe Phe Val Ile Phe Leu
            20
Gly Val Tyr Ile Val Thr Leu Val Gly Asn Ile Ser Ile Ile Thr Leu
                            40
Ile Arg Ile Ser Ser Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                        55
His Leu Ala Phe Val Asp Ile Leu Tyr Ser Thr Ser Val Ser Val Ile
                    70
                                        75
Met His Met Glu Leu Leu Gly His Gly Leu Ala Leu Pro Val Ala Ala
                85
                                    90
Cys Ala Ala Gln Leu Cys Ile Thr Val Ser Phe Gly Ser Ala Glu Cys
            100
                                105
Phe Leu Leu Ala Ala (Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
        115
                            120
                                                125
Pro Leu Leu Tyr Ser Thr Leu Met Ser Pro Arg Val Cys Phe Leu Leu
                        135
                                            140
Leu Gly Met Ser Tyr Val Gly Gly Cys Met Asn Gly Trp Thr Phe Thr
                    150
                                        155
Gly Cys Leu Leu Ser Leu Ser Phe Cys Gly Pro Asn Gln Ile Asp His
                165
                                    170
                                                         175
Phe Phe Cys Asp Phe Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
                                185
            180
                                                    190
Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ser Gly Ser Ile Ile Val
                            200
                                                205
        195
Val Thr Val Phe Val Ile Ala Val Ser Tyr Ile Tyr Ile Leu Ile Thr
                        215
                                            220
Ile Leu Asn Met Arg Ser Thr Glu Gly Arg His Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr
                                    250
                245
Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Glu Gln Asn Lys
            260
                                265
Val Leu Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Glu Ala Leu Arg Lys Ala
   290
                        295
Thr Val Arg Val Tyr Ser
                    310
<210> 1658
<211> 310
<212> PRT
<213> Mus musculus
<400> 1658
Met Glu Ala Glu Asn His Thr Thr Val Ala Glu Leu Ile Ile Leu Gly
Leu Thr Glu Asp Pro Lys Leu Cys Ile Val Phe Phe Val Ile Phe Leu
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35
                            40
Ile Arg Ile Ser Ser Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                                             60
His Leu Ala Phe Val Asp Ile Val Phe Ser Thr Ser Val Ser Val Ile
                    70
                                         75
Met Leu Met Glu Leu Leu Gly His Gly Leu Val Leu Ser Val Ala Thr
                                     90
Cys Ala Ala Gln Leu Cys Met Thr Val Ser Phe Gly Ser Ala Glu Cys
                                 105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                            120
Pro Leu Leu Tyr Ser Thr Leu Met Ser Ser Arg Val Cys Phe Leu Leu
                                             140
Leu Gly Ile Ser Tyr Val Gly Gly Phe Val Asn Gly Trp Thr Phe Thr
                    150
                                         155
Gly Cys Val Leu Ser Leu Ser Phe Cys Gly Pro Thr Gln Ile Asn His
                                    170
Phe Phe Cys Asp Phe Ser Pro Leu Leu Lys Val Ser Cys Ser Asp Val
            180
                                 185
Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ser Gly Ser Ile Ile Val
                            200
                                                 205
Val Thr Val Phe Val Ile Ala Val Ser Tyr Ile Tyr Ile Leu Ile Thr
                        215
                                             220
Ile Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala Phe Ser Thr
                    230
                                         235
Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr Ile Thr
                                     250
Val Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Glu Gln Asn Lys
                                 265
Val Ile Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Asp Ala Leu Arg Lys Ala
    290
                        295
Ile Val Arg Val Tyr Ser
<210> 1659
<211> 310
<212> PRT
<213> Mus musculus
<400> 1659
Met Glu Pro Gly Asn Tyr Thr Val Val Thr Glu Val Ile Leu Leu Gly
Phe Thr Glu Asp Ala Ile Ile Arq Ala Ile Leu Phe Ile Val Phe Leu
            20
Ile Ile Tyr Ser Val Thr Leu Met Gly Asn Ala Ser Ile Ile Met Leu
        35
                            40
Ile Arg Arg Ser Pro Gln Leu His Thr Pro Met Tyr Leu Leu Ser
    50
                        55
                                             60
His Leu Ala Phe Val Asp Ile Gly Tyr Ser Ser Val Thr Pro Ile
                    70
                                        75
Met Leu Lys Gly Phe Leu Arg Lys Glu Thr Phe Ile Leu Val Ser Gly
                                    90
Cys Val Ala Gln Leu Cys Ser Val Val Thr Phe Gly Ser Thr Glu Cys
            100
                                105
                                                     110
```

Gly Val Tyr Ile Ile Thr Leu Val Gly Asn Ile Ser Ile Ile Thr Leu

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Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
Pro Leu Leu Tyr Ala Thr Gln Met Ser Ser Thr Val Cys Ile Leu Leu
Val Gly Ala Ser Tyr Leu Gly Gly Cys Val Asn Ala Trp Thr Phe Thr
                                        155
Gly Cys Leu Leu Asn Leu Ser Phe Cys Arg Pro Asn Lys Val Asn His
                                    170
Phe Phe Cys Asp Tyr Ser Pro Leu Leu Lys Ile Ser Cys Ser His Asp
                                185
Phe Ser Ser Glu Val Ile Pro Ala Ile Ser Ser Gly Ser Ile Ile Val
        195
Val Thr Val Phe Ile Ile Ala Leu Ser Tyr Val Tyr Ile Leu Val Ser
                        215
                                            220
Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr Ile Thr
                245
                                    250
Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp Gln Asn Lys
            260
                                265
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Ile
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Met Lys Lys Leu
Met Ala Asn Thr His His
```

<211> 306

<212> PRT

<213> Mus musculus

<400> 1660

Met Met Asn Lys Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Val Thr Arg Asp Pro Glu Leu Arg Lys Ile Leu Ser Val Leu Phe Leu Ile Met 25 Tyr Met Ala Thr Val Phe Gly Asn Leu Leu Ile Val Val Thr Ile Thr 40 Arg Ser Pro Ser Leu Arg Ser Pro Met Tyr Phe Phe Leu Leu Ser Leu 55 Ser Leu Met Asp Val Thr Tyr Ser Ser Val Ile Ala Pro Lys Leu Ile 75 Met Asp Ser Leu Ser Glu Arg Thr Ile Val Ser Phe Glu Arg Cys Met Thr Gln Leu Phe Ala Glu His Phe Phe Gly Gly Val Gly Ile Ile Leu 100 105 Leu Ile Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Val Lys Met Met Thr Pro Arg Val Cys Cys Leu Met Val Gly 135 140 Gly Ala Trp Val Gly Gly Ser Met His Ala Thr Ile Gln Leu Leu Phe 150 155 Met Tyr Gln Ile Pro Phe Cys Ser Ser Asn Ile Ile Asp His Phe Met 170 Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Met Asp Thr His Ile 185 Leu Gly Leu Leu Val Ile Leu Asn Ser Gly Val Met Cys Val Ser Ile

```
200
Phe Leu Ile Leu Ile Ala Ser Tyr Met Val Ile Leu Cys Ser Leu Lys
                        215
                                            220
Ser Tyr Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Phe Ala Val Val Leu Phe Phe Val Pro Cys Ile Phe Leu Tyr
                245
Met Arg Pro Val Val Thr Phe Pro Ile Asp Lys Ala Met Ala Val Ser
                                265
Phe Thr Ile Val Glu Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
Asn Thr Glu Val Lys Tyr Ala Ile Lys Asn Met Cys Arg Lys Gln Gly
Ser His
305
<210> 1661
<211> 315
<212> PRT
<213> Mus musculus
<400> 1661
Met Gln His Gln Val Asn Gln Ser Thr Gly Val Val Phe Val Phe Val
                                    10
Gly Phe Ser Glu Tyr Pro Asn Leu Gln Val Pro Leu Phe Leu Ile Phe
                                25
Leu Ile Ile Tyr Thr Ile Thr Val Leu Glu Asn Leu Gly Met Ile Leu
Val Ile Arg Ile Asn Ala Lys Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser His Leu Ser Ile Val Asp Leu Cys Tyr Thr Thr Val Ile Ala Pro
                    70
                                        75
Lys Leu Leu Asp Leu Leu Ile Thr Glu Asp Arg Ser Met Ser Leu Lys
Gly Cys Ile Ile Gln Phe Tyr Phe Gly Cys Ala Cys Val Val Thr Gln
                                105
                                                     110
Asn Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                            120
Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Lys Leu Cys Ala Leu
                                            140
Leu Val Thr Gly Thr Tyr Leu Trp Gly Gly Leu Cys Ala Thr Thr Leu
                    150
                                        155
Thr Tyr Phe Leu Leu Ala Leu Ser Tyr Cys Arg Ser Ser Ile Ile Asn
                                    170
                                                         175
His Phe Cys Cys Glu Tyr Ser Ala Ile Ile Ser Ala Ala Cys Ser Asp
            180
                                185
                                                    190
Ser Ser Ile Ser Gln Ile Ala Cys Leu Leu Ile Cys Met Phe Asn Glu
                            200
Ile Cys Ser Leu Leu Ile Ile Ile Val Ser Tyr Val Val Ile Phe Thr
    210
                        215
Thr Val Ile Lys Ile Pro Thr Lys Gly Ala Leu Gln Lys Ala Leu Ser
                    230
                                        235
Thr Cys Ala Pro His Leu Thr Ala Ile Ser Phe Cys His Gly Ile Ile
                                    250
Leu Leu Leu Tyr Cys Val Leu Lys Ser Lys Ser Ser Leu Leu Val
            260
                                265
                                                    270
Lys Ile Val Thr Val Phe Tyr Ser Met Val Ile Pro Met Leu Asn Pro
                                                285
                            280
```

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295
Leu Ile His Met Lys Ile Leu Ser Gln Ser Leu
                    310
<210> 1662
<211> 312
<212> PRT
<213> Mus musculus
<400> 1662
Met Gly Ile Trp Asn His Thr Ser Val Lys Glu Phe Ile Leu Ile Gly
Leu Thr Glu Asn Pro Asn Trp Gln Val Pro Leu Phe Phe Leu Phe Cys
            20
Ile Val Tyr Phe Ile Ile Leu Val Gly Asn Trp Gly Met Ile Ile Leu
        35
                            40
Ile Trp Leu Asn Ala Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Ile Ile Ala Pro Lys
                    70
                                                             80
Met Leu Ile Asn Phe Leu Ser Glu His Lys Ser Thr Arg Leu Phe Ala
                                     90
Cys Ile Leu Gln Ser Phe Phe Phe Ala Val Tyr Val Thr Thr Glu Val
                                 105
Ile Phe Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Ala Asn
                            120
Pro Leu Met Tyr Thr Val Ile Met Thr Asn Asn Ile Cys Thr Gln Met
                                             140
Val Leu Ala Ser Tyr Leu Gly Gly Leu Ile Asn Ser Met Ile His Thr
                                         155
Ile Gly Leu Leu Lys Leu Asp Phe Cys Gly Pro Asn Ile Val Asn His
                165
                                     170
Phe Phe Cys Asp Val Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Ala
            180
                                185
His Ile Asn Glu Met Leu Leu Leu Val Phe Ser Gly Val Phe Ala Ile
                            200
                                                 205
Ser Thr Phe Ile Ile Val Met Val Ser Tyr Ile His Ile Ile Ile Ala
                        215
                                             220
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ala Ser His Leu Thr Ala Val Ala Leu Phe Tyr Gly Ser Leu Thr
                245
                                     250
Phe Asn Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Met Glu Gln Glu Lys
            260
                                265
Leu Ser Ala Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
        275
                            280
                                                 285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ala Lys Lys Leu
   290
                        295
                                            300
Ile Cys Gly Glu Arg Asn Ala Pro
305
                    310
<210> 1663
<211> 312
<212> PRT
<213> Mus musculus
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Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Thr Val Arg Lys

```
<400> 1663
Met Ala Ile Trp Asn His Thr Gly Val Ser Glu Phe Ile Leu Val Gly
Leu Thr Glu Asn Pro Asn Trp Gln Val Pro Leu Phe Leu Leu Phe Ser
                                                    30
Val Val Tyr Phe Ile Ile Leu Val Gly Asn Trp Gly Met Ile Ile Leu
                            40
Ile Trp Leu Asn Ala Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                                            60
Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Ile Ile Ala Pro Lys
                    70
                                                             80
Met Leu Leu Asn Phe Leu Ser Glu His Lys Ser Ser Thr Phe Phe Ala
                                    90
Cys Ile Leu Gln Ser Phe Phe Phe Ala Val Tyr Val Thr Thr Glu Val
            100
                                105
                                                    110
Ile Leu Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Ala Asn
                            120
                                                125
Pro Leu Met Tyr Thr Val Ile Met Thr His Asn Ile Cys Thr Gln Met
                        135
                                            140
Val Leu Ala Ser Tyr Leu Gly Gly Leu Ile Asn Ser Met Ile His Thr
                    150
                                        155
Ile Gly Leu Leu Lys Leu Asp Phe Cys Gly Pro Asn Ile Val Asn His
                                    170
Phe Phe Cys Asp Val Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Ala
            180
                                185
                                                    190
His Ile Asn Glu Met Leu Leu Val Phe Ser Gly Met Ile Ala Ile
        195
                            200
                                                205
Phe Thr Phe Ile Ile Met Val Ser Tyr Ile His Ile Ile Ala
                        215
                                            220
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Ser Leu Thr
                                    250
Phe Asn Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Met Glu Gln Glu Lys
                                265
Leu Ser Ala Met Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ala Lys Arg Leu
    290
                        295
                                            300
Ile Cys Arg Glu Ser Ser Thr Ser
305
                    310
<210> 1664
<211> 312
<212> PRT
<213> Mus musculus
<400> 1664
Met Asn Thr Leu Asn Tyr Thr Phe Lys Pro Asp Phe Ile Leu Met Gly
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Thr Leu Glu Asn Leu Leu Thr Ser Thr Lys Asn Ile Ser Phe Met Gly
Cys Phe Thr Gln Met Tyr Phe Phe Val Leu Leu Ala Ala Thr Glu Cys
                                105
Phe Leu Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Ser Val Ile Met Ser Lys Arg Phe Cys Ser Ala Leu
                        135
                                            140
Leu Thr Gly Ser Tyr Val Phe Gly Ala Val Asp Ser Thr Val Asn Met
                    150
                                        155
Leu Cys Met Gly Thr Leu Asp Phe Cys Asn Ser Asn Val Ile His Asp
                165
                                    170
Phe Phe Cys Asp Thr Ser Pro Leu Ile Ala Leu Ser Cys Ser Asn Thr
           180
                                185
                                                    190
His Asp Ile Glu Phe Ile Ile Phe Ile Phe Ala Gly Ser Thr Leu Leu
       195
                            200
Leu Ser Leu Ile Thr Ile Ser Ala Ser Tyr Leu Ser Ile Leu Ser Thr
                        215
Ile Leu Lys Ile Ser Ser Thr Ser Gly Lys Gln Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Ile Leu Ala Val Thr Ile Phe Tyr Gly Thr Met Ile
                245
                                    250
Phe Thr His Leu Lys Ser Asn Lys Ser Phe Ser Leu Gly Lys Asp Gln
                                265
                                                    270
Val Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Cys Ala Ile Asp Arg Ile
                        295
Ile Lys Lys Arg Glu Lys Gly Leu
```

<211> 310 <212> PRT

<213> Mus musculus

<400> 1665

Met Thr Glu Asn Asn Phe Thr Lys Val Thr Val Phe Met Phe Ser Gly 10 Phe Ser Asp His Pro Glu Leu Gln Val Ser Leu Phe Leu Ile Phe Leu 25 Phe Ile Tyr Leu Phe Thr Val Trp Gly Asn Ile Gly Leu Ile Leu Leu 45 40 Ile Arg Ile Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 5.5 60 Asn Leu Ala Phe Ile Asp Ile Phe Tyr Ser Ser Thr Val Thr Pro Lys 70 75 Ala Leu Val Asp Phe Gln Ser Thr Gln Lys Ser Ile Ser Phe Val Gly 90 85 Cys Phe Val Gln Met Tyr Phe Phe Val Gly Leu Val Cys Ser Glu Cys 100 105 110 Phe Leu Leu Gly Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Ser Val Ile Met Ser Gln Lys Val Cys Asn Trp Leu 135 140 Ala Val Ile Pro Tyr Met Ile Gly Phe Thr Asn Ser Leu Ile Ser Ile 150 155 Cys Val Ile Ser Ser Leu Pro Leu Cys Asp Pro Tyr Ile Asn His Phe

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165
                                    170
Phe Cys Asp Thr Thr Ala Leu Leu Ala Leu Ser Cys Val Asp Ala Phe
                                185
                                                    190
Ser Thr Glu Leu Val Ile Phe Val Leu Ala Gly Phe Thr Leu Leu Ser
                            200
                                                205
Ser Leu Leu Ile Ile Thr Phe Thr Tyr Val Thr Ile Ile Ser Ala Ile
                                            220
Leu Arg Ile Gln Ser Ala Ala Gly Arg Trp Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ala Ser His Leu Thr Gly Val Thr Val Phe Tyr Gly Ser Leu Ile Phe
                                    250
Thr Tyr Leu Gln Pro Asp Asn Thr Ser Ser Leu Thr Gln Ala Gln Val
                                265
Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Asn Ala Leu Leu Arg Val Ile
                                            300
                        295
His Arg Lys His Leu Leu
<210> 1666
<211> 312
<212> PRT
<213> Mus musculus
<400> 1666
Met Asp Pro Gly Asn His Thr Val Val Lys Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr Glu Asn Pro Asp Trp Gln Ile Pro Leu Phe Leu Leu Phe Ser
Ile Ile Tyr Leu Ile Ile Phe Val Gly Asn Trp Leu Met Ile Phe Leu
                            40
Ile Trp Leu Asn Ala His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Val Ile Ala Pro Lys
                    70
Met Leu Ile Asn Ile Val Ser Glu His Lys Ser Ser Arg Leu Leu Ser
                                    90
Cys Val Leu Gln Ser Phe Phe Phe Met Val Tyr Ala Thr Thr Glu Val
            100
                                105
Ile Leu Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Ala Asn
                            120
Pro Leu Met Tyr Thr Val Ile Met Thr Phe Ser Ile Cys Ile Ser Met
                        135
                                            140
Val Leu Ala Cys Tyr Leu Cys Gly Ile Ile Asn Ser Leu Thr His Thr
                    150
                                        155
Ile Ser Leu Leu Arg Leu Asp Phe Cys Gly Pro Asn Ile Val Asn His
                165
                                    170
Phe Phe Cys Asp Val Pro Pro Leu Leu Lys Leu Ser Cys Ser Asp Ala
            180
                                185
                                                     190
His Ile Asn Glu Met Leu Leu Val Phe Ser Gly Val Ile Ala Ile
                            200
Phe Thr Phe Ile Ile Val Met Val Ser Tyr Ile His Ile Ile Ala
                        215
Ile Leu Lys Ile Arg Ser Thr Glu Gly Arg Arg Lys Ala Phe Ser Thr
                                        235
Cys Ala Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Ser Gly Thr
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Phe Ser Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Met Glu Gln Glu Lys Val Ser Ala Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ala Lys Lys Leu 295 Ile Cys Gly Trp Ser Asn Thr Ser 310 <210> 1667 <211> 305 <212> PRT <213> Mus musculus <400> 1667 Met Val Ser Glu Phe Ile Leu Trp Gly Leu Ser Ser Ser Gln Arg Ile 5 10 Glu Val Leu Leu Phe Met Val Phe Ser Met Leu Tyr Leu Leu Ile Val 20 2.5 Ser Gly Asn Ile Val Ile Leu Val Leu Ile Thr Thr Asp Pro His Leu 40 4.5 His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Phe Ile Asp Met 55 Trp Leu Ser Ser Val Thr Thr Pro Lys Met Ile Thr Asp Phe Leu Arg 70 75 Glu Asn Lys Thr Ile Ser Phe Ala Gly Cys Met Ser Gln Val Phe Phe 85 90 Ala His Cys Ile Ala Ala Gly Glu Met Val Leu Val Ile Met Ala 100 105 110 Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Phe Thr Ile 115 120 125 Met Asn Met Lys Arg Cys Thr Gly Leu Val Phe Thr Ser Trp Thr Thr 135 140 Gly Phe Val His Ala Leu Ser His Leu Val Val Ile Val Glu Leu Pro 150 155 Phe Cys Gly Pro Lys Glu Ile Asp Ser Phe Phe Cys Asp Met Pro Leu 170 165 Val Ile Lys Leu Ala Cys Ile Asp Ser Arg Asp Leu Asp Val Leu Met 180 185 190 Asn Ala Asp Cys Gly Leu Val Ala Val Thr Cys Phe Ile Leu Leu Leu 195 200 205 Ile Ser Tyr Thr Tyr Ile Leu Ile Thr Val Cys Gln Ser Ser Lys Ala 215 220 Gly Ala Ser Lys Ala Met Asn Thr Cys Thr Ala His Ile Thr Val Val 230 235 Leu Ile Phe Phe Val Pro Cys Ile Phe Ile Tyr Val Trp Pro Leu Ser 245 250 Ile Ile Trp Leu Asp Lys Phe Leu Ala Val Phe Tyr Ser Val Phe Thr 260 265 270 Pro Leu Leu Asn Pro Ala Ile Tyr Thr Leu Arg Asn Lys Glu Met Lys 280 285 Asn Ala Met Lys Lys Phe Ile Asn Ser Tyr Leu Ser His Lys Gly Asn 295

Leu 305

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<212> PRT
<213> Mus musculus
<400> 1668
Met Lys Asn Lys Thr Ser Leu Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                     10
Asp Val Pro Glu Leu Gln Val Ala Val Phe Thr Phe Leu Phe Leu Ala
                                25
Tyr Val Phe Ser Met Ile Gly Asn Leu Thr Ile Leu Ile Leu Thr Leu
                            40
Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
Ser Phe Leu Glu Ile Ser Phe Thr Asn Ile Phe Ile Pro Arq Val Leu
                    70
                                         75
Val Ser Ile Thr Thr Gly Asn Lys Ser Ile Ser Phe Ala Gly Cys Phe
Ala Gln Tyr Phe Phe Ala Ile Phe Leu Gly Ala Thr Glu Phe Tyr Leu
            100
                                105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
        115
                            120
                                                 125
His Tyr Met Ala Ile Met Ser Asn Arg Val Cys Thr His Leu Val Leu
   130
                        135
                                             140
Cys Ser Trp Leu Gly Gly Leu Met Ala Ile Ile Pro Pro Ile Thr Leu
                    150
                                         155
Met Ser Gln Gln Asn Phe Cys Ala Ser Asn Arg Leu Asn His Tyr Phe
                                    170
                                                         175
Cys Asp Phe Glu Pro Leu Leu Glu Leu Ser Cys Ser Asp Thr Ser Leu
            180
                                185
                                                     190
Ile Glu Lys Val Val Phe Leu Val Ala Ser Val Thr Leu Val Val Thr
        195
                            200
Leu Met Leu Val Thr Leu Ser Tyr Thr Phe Ile Ile Lys Thr Ile Leu
                        215
                                             220
Lys Leu Pro Ser Ala Gln Gln Arg Thr Lys Ala Phe Ser Thr Cys Ser
                    230
                                         235
Ser His Met Ile Val Ile Ser Leu Ser Tyr Gly Ser Cys Phe Phe Met
                                    250
Tyr Val Lys Pro Ser Ala Lys Val Gly Gly Thr Phe Asp Lys Gly Val
            260
                                265
Ala Leu Leu Ile Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Thr Val Lys
Lys Leu Val Asn Leu
305
<210> 1669
<211> 310
<212> PRT
<213> Mus musculus
<400> 1669
Met Lys Arg Ala Asn Cys Thr Glu Val Arg Glu Phe Val Phe Gln Gly
                                    10
Phe Ser Asn Phe Gln Glu His Gln Leu Thr Leu Phe Ile Ile Phe Phe
            20
Ala Leu Tyr Ile Leu Thr Leu Thr Gly Asn Val Ile Ile Val Thr Ile
```

<211> 309

```
Ile Arg Ile Asp His His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Val Leu Ser Thr Ser Glu Thr Phe Tyr Ser Leu Val Ile Ile Pro Arg
                    70
Met Leu Gly Ser Leu Val Gly Leu Ser Gln Thr Ile Ser Leu Glu Cys
                                    90
Cys Gly Thr Gln Leu Phe Phe Phe Leu Gly Phe Gly Ile Thr Asn Cys
Phe Leu Leu Ala Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Arg Tyr Ser Val Ile Met Asn Trp Arg Val Cys Val Ile Leu
                        135
                                            140
Ala Ser Ser Val Cys Ala Thr Gly Phe Leu Leu Ser Leu Val Gln Ala
                    150
                                        155
Leu Ala Ile Phe Arg Leu Pro Phe Cys Asn Thr Leu Ile Lys His Phe
                165
                                    170
Phe Cys Asp Val Arg Pro Ile Leu Asp Leu Ala Cys Thr Val Pro Val
            180
                                185
Ile Asn Gln Val Leu Thr Leu Val Leu Thr Leu Met Val Leu Thr Ala
Pro Ala Ile Phe Leu Phe Val Ser Tyr Ala Leu Ile Ile Ser Thr Ile
                        215
                                            220
Leu Lys Ile Ala Ser Ser Asp Gly Trp Lys Lys Thr Phe Ala Thr Cys
                    230
                                        235
Ser Ser His Leu Thr Val Val Ile His Tyr Gly Cys Ala Ser Ile
                                    250
Val Tyr Phe Lys Pro Lys Ser Glu Asn Ser Lys Asp Gln Asp Gln Leu
            260
                                265
                                                    270
Leu Ser Val Thr Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Val Val
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Gln Asp Ala Leu Arg Lys Val Leu
Cys Arg Lys Ser Leu Ser
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1670

 Met
 Lys
 Lys
 Thr
 Asn
 Cys
 Thr
 His
 Val
 Arg
 Glu
 Phe
 Val
 Phe
 Gln
 Gly
 10
 Leu
 Phe
 Val
 Phe
 Phe

```
130
                        135
                                            140
Ala Ser Ser Val Gly Ala Thr Gly Phe Leu Leu Ser Leu Ile Gln Ala
                    150
                                        155
Val Ala Ile Phe Arg Leu Pro Phe Cys Asn Thr Leu Ile Glu His Phe
                                    170
                165
Phe Cys Asp Val Arg Pro Ile Leu Asp Leu Ala Cys Thr Val Pro Val
                                185
                                                     190
Ile Asn Asp Ile Leu Thr Leu Ala Leu Ser Leu Met Val Ile Thr Ala
                            200
                                                 205
Pro Ala Thr Phe Leu Phe Val Ser Tyr Val Leu Ile Ile Ser Thr Ile
                                            220
Leu Lys Ile Ala Ser Ala Glu Gly Arg Arg Lys Thr Phe Ala Thr Cys
                    230
                                        235
                                                             240
Ala Ser His Leu Thr Val Val Val Ile His Tyr Gly Cys Ala Ser Ile
                                    250
Ala Tyr Phe Lys Pro Lys Ser Glu Asn Thr Lys Asp Gln Asp Gln Leu
                                                    270
Ile Ser Val Thr Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Val Val
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Gln Asp Ala Leu Arg Lys Val Leu
                        295
                                            300
Gly Lys Lys Ser Leu Ser
305
<210> 1671
<211> 305
<212> PRT
<213> Mus musculus
<400> 1671
Met Asp Gln Asn Asn Thr Val Ser Glu Phe Ile Met Leu Gly Phe
Thr Thr Asp Pro Val Ile Gln Lys Val Leu Phe Ala Val Phe Leu Val
Val Tyr Thr Leu Thr Leu Met Gly Asn Ser Ser Leu Ile Met Leu Ile
                            40
Cys Asn Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly Asn
Leu Ser Phe Leu Asp Leu Gly Leu Ser Ser Val Tyr Thr Pro Lys Ile
                    70
Leu Glu Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ala Gly Cys
                                    90
Val Ala Gln Phe Phe Phe Ser Ala Ala Leu Asp Tyr Thr Glu Cys Tyr
                                105
Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Lys Pro
                            120
Leu Leu Tyr Ser Gln Ala Met Ser Leu Lys Leu Cys Val Cys Phe Val
                        135
                                            140
Ala Ala Ser Tyr Val Gly Gly Phe Ile Asn Ser Val Ile Ile Thr Lys
                    150
                                                             160
Asp Thr Phe Ala Leu Thr Phe Cys Asn Asp Asn Val Ile Asp Asp Phe
                165
                                    170
                                                         175
Phe Cys Asp Ile Pro Pro Leu Val Lys Leu Ala Cys Gly Lys Lys
            180
                                185
                                                    190
Ser Phe Gln Ser Val Leu Phe Phe Leu Leu Thr Ser Asn Val Ile Ile
        195
                            200
                                                205
Pro Ile Val Phe Ile Leu Ala Thr Tyr Leu Phe Ile Ile Ala Thr Ile
```

215

220

```
Leu Arg Ile Arg Ser Thr Gln Gly Arg Leu Lys Ala Phe Ser Thr Cys
                    230
Ser Ser His Leu Ile Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr
                245
                                    250
Ile Tyr Ala Arg Pro Arg Ser Ser Tyr Ser Leu Asp Arg Asp Lys Ile
                                265
                                                    270
Val Ser Thr Phe Tyr Thr Val Val Phe Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Asn Lys Leu Leu
                        295
Lys
305
<210> 1672
<211> 317
<212> PRT
<213> Mus musculus
<400> 1672
Met Arg Asn Leu Ser Gly Ser His Val Glu Glu Phe Val Leu Val Gly
Phe Pro Thr Ser Arg Pro Phe Gln Ala Leu Leu Phe Val Phe Phe Phe
Ala Ile Tyr Leu Leu Thr Leu Leu Glu Asn Val Leu Ile Val Ser Thr
        35
Ile Trp Leu Thr Pro Ser Leu His Arg Pro Met Tyr Phe Phe Leu Gly
His Leu Ser Phe Leu Glu Leu Trp Tyr Ile Asn Val Thr Ile Pro Arg
Leu Leu Gly Ala Phe Leu Thr Gln Asp Gly Arg Val Ser Tyr Gly Gly
Cys Met Thr Gln Leu Tyr Phe Phe Ile Ala Leu Ala Cys Thr Glu Cys
                                105
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Glu
                            120
Pro Leu Arg Tyr Pro Ser Leu Met Pro Pro Arg Leu Ala Thr Arg Leu
                                            140
Ala Ala Ser Trp Gly Ser Gly Phe Phe Ser Ser Met Met Lys Leu
                    150
                                        155
Leu Phe Ile Ser Arg Leu Ser Tyr Cys Gly Pro Asn Ile Ile Asn His
                                    170
Phe Phe Cys Asp Ile Ser Pro Leu Leu Asn Leu Thr Cys Ser Asp Lys
                                185
Glu Gln Ala Glu Leu Val Asp Phe Leu Leu Ala Leu Val Met Ile Leu
                            200
Leu Pro Leu Val Ala Val Ser Ser Tyr Ala Ala Ile Ile Val Ala
                        215
Ile Leu Arg Ile Pro Thr Ala Gln Gly Arg His Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Ala Val Val Ile Tyr Tyr Ser Ser Thr Leu
                                    250
Phe Thr Tyr Ala Arg Pro Arg Ala Met Tyr Thr Phe Asn Tyr Asn Lys
                                265
Ile Ile Ser Val Leu Tyr Thr Val Ile Val Pro Phe Leu Asn Pro Ala
                            280
                                                285
Ile Tyr Cys Leu Arg Asn Lys Glu Val Lys Asp Ala Phe Arg Lys Thr
                        295
Met Leu Gly Arg Cys His His Pro Arg Glu Gly Pro Asp
```

305 310 315

```
<210> 1673
<211> 312
<212> PRT
<213> Mus musculus
<400> 1673
Met Ser Pro Gly Asn Ser Ser Trp Ile His Pro Ser Ser Phe Leu Leu
Leu Gly Ile Pro Gly Leu Glu Glu Leu Gln Phe Trp Leu Gly Leu Pro
Phe Gly Thr Val Tyr Leu Ile Ala Val Leu Gly Asn Val Ile Ile Leu
Phe Val Ile Tyr Leu Glu His Ser Leu His Gln Pro Met Phe Tyr Leu
                        55
Leu Ala Ile Leu Ala Val Thr Asp Leu Gly Leu Ser Thr Ala Thr Val
Pro Arg Ala Leu Gly Ile Phe Trp Phe Gly Phe His Lys Ile Ala Phe
                85
                                     90
Arg Asp Cys Val Ala Gln Met Phe Phe Ile His Leu Phe Thr Gly Ile
                                 105
                                                     110
Glu Thr Phe Met Leu Val Ala Met Ala Phe Asp Arg Tyr Ile Ala Ile
                             120
                                                 125
Cys Asn Pro Leu Arg Tyr Asn Thr Ile Leu Thr Asn Arg Thr Ile Cys
                                             140
Ile Ile Val Gly Val Gly Leu Phe Lys Asn Phe Ile Leu Val Phe Pro
                    150
                                         155
Leu Ile Phe Leu Ile Leu Arg Leu Ser Phe Cys Gly His Asn Ile Ile
                                     170
                                                         175
Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Val
            180
                                 185
                                                     190
Ser Ile Lys Val Asn Val Leu Phe Gly Leu Ile Leu Ile Ser Met Ile
        195
                             200
Leu Leu Asp Val Val Leu Ile Ala Leu Ser Tyr Ala Lys Ile Leu His
                                             220
Ala Val Phe Lys Leu Pro Ser Trp Glu Ala Arg Leu Lys Ala Leu Asn
                    230
                                         235
Thr Cys Gly Ser His Val Cys Val Ile Leu Ala Phe Phe Thr Pro Ala
                                     250
Phe Phe Ser Phe Leu Thr His Arg Phe Gly His Asn Ile Pro Arg Tyr
            260
Ile His Ile Leu Leu Ala Asn Leu Tyr Val Ile Ile Pro Pro Ala Leu
                             280
Asn Pro Leu Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Asp Arg Val
                        295
Val Ile Phe Phe Cys Lys Glu Val
                    310
<210> 1674
<211> 320
<212> PRT
<213> Mus musculus
<400> 1674
Met Ala Lys Glu Val Glu Val Arg Met Lys Ala Trp Asn Glu Thr Thr
                                    10
```

```
Val Leu Glu Phe Val Leu Glu Gly Phe Leu Val Ala Gln His Leu Gly
Lys Val Leu Phe Leu Val His Leu Leu Val Tyr Leu Ala Ser Val Thr
                            40
Gly Asn Thr Leu Ile Ile Ala Ile Thr Trp Ser Asp Pro Arg Leu Gln
Thr Pro Met Tyr Phe Phe Leu Arg Ser Phe Ser Phe Cys Glu Cys Cys
                    70
Phe Ile Ser Thr Val Ile Pro Lys Leu Leu Ala Ile Phe Leu Phe Gly
Asp Arg Thr Ile His Phe Thr Pro Cys Ile Ile Gln Ala Phe Ser Phe
                                105
Leu Phe Leu Gly Ser Thr Ile Phe Phe His Met Ala Val Met Ser Leu
                            120
Asp Arg Tyr Leu Ala Ile Cys Lys Pro Leu Arg Tyr Pro Ala Ile Met
                        135
                                            140
Asn Pro Arg Val Cys Phe Leu Leu Val Phe Phe Ser Tyr Val Leu Ser
Phe Ile Leu Val Thr Gly Val Ile Leu Arg Leu Ser Arg Leu Ser Phe
                                    170
Cys Gly Ser Asn Val Ile Pro His Phe Phe Cys Asp Leu Gly Ser Leu
                                185
                                                    190
Ile His Leu Ser Cys Ser Asp Thr Lys Ser Leu Glu Ser Met Ala Phe
                            200
                                                205
Gly Val Ala Val Val Leu Phe Thr Ser Val Leu Ala Ala Ile Phe
                                            220
                        215
Ala Tyr Ser Asn Ile Leu Ile Ser Ile Met Arg Leu Pro Leu Ala Lys
                                        235
Asp Arg Gln Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val Leu
                                    250
Ser Leu Met Tyr Gly Ser Cys Val Phe Ile Tyr Val Lys Pro Lys Gln
                                265
Val Ser Arg Leu Glu Ser Asn Arg Glu Ala Ala Leu Val Asn Thr Val
        275
                            280
Val Thr Pro Leu Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn Lys Gln
                        295
                                            300
Val His Gln Ala Leu Arg Asp Ala Leu Ser Arg Val Asn Leu Gln Lys
                    310
                                         315
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1675

 Met
 Leu
 His
 Ser
 Asn
 Lys
 Thr
 Gln
 Phe
 His
 Pro
 Ser
 Ser
 Phe
 Leu
 Leu
 Leu
 Ile
 Ile
 Leu
 Leu
 Leu
 Trp
 Ile
 Gly
 Phe
 Pro
 Phe
 Phe</th

```
100
                                105
Glu Ser Val Val Leu Thr Ile Met Ala Ile Asp Arg Tyr Ile Ala Ile
                            120
                                                125
Cys Tyr Pro Leu Arg Tyr Ser Met Ile Leu Thr Asn Lys Val Ile Ala
    130
                        135
                                            140
Ile Leu Gly Ile Ile Ile Val Arg Thr Leu Ile Phe Val Thr Pro
                    150
                                        155
Phe Ile Phe Leu Ile Leu Arg Leu Pro Phe Cys Gly Val Arg Ile Ile
                                    170
Pro His Thr Tyr Cys Glu His Met Gly Leu Ala Lys Leu Ala Cys Ala
            180
                                185
Asn Ile Lys Val Asn Val Ile Tyr Gly Leu Val Ala Phe Ser Val Gly
        195
                            200
                                                 205
Tyr Ile Asp Leu Ser Val Ile Gly Phe Ser Tyr Ile Arg Ile Leu Gln
                        215
                                            220
Ala Val Phe Arg Leu Pro Ser Trp Asp Ala Arg Leu Lys Ala Leu Ser
                    230
                                        235
Thr Cys Gly Ser His Val Ser Val Met Leu Ala Phe Tyr Leu Pro Ala
                                    250
Leu Phe Ser Phe Met Thr His Arg Phe Gly His Asn Ile Pro His Tyr
                                265
Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Pro Pro Ala Leu
                            280
Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Glu Arg Val
                        295
                                            300
Leu Arg Met Leu Asn Pro Lys Met His
                    310
<210> 1676
<211> 319
<212> PRT
<213> Mus musculus
<400> 1676
Met Leu Gln Met Gln Asp Asn Thr Glu Phe Leu Ser Asn Phe Thr Ser
                 5
Lys Leu Pro Thr Phe Leu Leu Thr Gly Ile Pro Gly Leu Glu Ser Ala
                                25
His Gly Trp Ile Ser Ile Pro Phe Cys Cys Leu Tyr Ala Thr Ala Leu
        35
                            40
Ser Gly Asn Ser Met Ile Leu Phe Ile Ile Val Thr Gln His Ser Leu
                        55
His Glu Pro Met Tyr Tyr Phe Leu Ser Val Leu Ser Ala Thr Asp Leu
                    70
                                        75
Gly Leu Thr Phe Ser Thr Met Ser Thr Thr Leu Arg Ile Leu Trp Phe
                85
                                    90
Gln Ala Asn Glu Ile Ser Leu Asp Phe Cys Ile Val Gln Met Phe Phe
            100
                                105
Leu His Gly Phe Thr Cys Thr Glu Ser Gly Val Leu Val Ala Met Ala
        115
                            120
Phe Asp Arg Tyr Val Ala Ile Tyr Lys Pro Leu Arg Tyr Thr Met Ile
                        135
                                            140
Leu Met Asn Ser Arg Ile Ile Gln Ile Gly Phe Leu Val Ile Met His
```

Thr Leu Leu Thr Val Pro Leu Leu Leu Leu Lys Pro Val Ser

Phe Cys Lys Arg Asn Thr Leu Ser His Ser Tyr Cys Tyr His Pro Asp

```
Val Ile Lys Leu Ala Cys Ser Asp Thr Arg Ala Asn Ser Ile Cys Gly
                            200
Leu Val Asp Leu Ile Leu Thr Thr Gly Val Asp Ile Pro Cys Ile Val
                        215
                                            220
Leu Ser Tyr Ile Leu Ile Ile Arg Ser Val Leu Asn Ile Ala Phe Ser
                                        235
Glu Glu Arq His Lys Ala Phe Ser Thr Cys Val Ser His Ile Ala Ala
                                    250
Val Ala Val Phe Tyr Ile Pro Thr Phe Ser Leu Ser Leu Val His Arg
                                265
Tyr Gly Arg Ser Val Pro Lys Val Val His Thr Met Met Ala Asn Val
                            280
Tyr Leu Leu Pro Pro Val Leu Asn Pro Ile Ile Tyr Ser Val Lys
                        295
Thr Lys Gln Ile Arg Lys Ala Ile Leu Ser Leu Leu Phe Ala Lys
                    310
```

<210> 1677 <211> 316 <212> PRT

<213> Mus musculus

<400> 1677

Met Val Asn Asp Thr Thr His His Tyr Ile Ser Phe Phe Tyr Leu Val Gly Ile Pro Gly Phe Glu Asn Phe Tyr Tyr Leu Ile Ser Ile Pro Val Cys Leu Leu Phe Val Leu Thr Leu Leu Gly Asn Ser Val Val Ile Ala Thr Ile Lys Leu Glu Pro Ser Leu His Gln Pro Met Tyr Phe Phe Leu Cys Met Leu Ala Met Asn Asp Ile Leu Leu Thr Cys Ser Thr Ser Leu Lys Met Leu Gly Ile Phe Trp Phe Asn Glu His Trp Ile Glu Phe Asp Val Cys Leu Thr Gln Met Tyr Phe Ile His Thr Leu Cys Ile Phe Glu 105 Ser Ala Ile Leu Val Ala Met Ala Phe Asp Arg Phe Val Ala Ile Cys 120 125 Ile Pro Leu His Tyr Ala Thr Ile Leu Thr Thr Ala Met Val Ile Lys 140 135 Leu Gly Val Val Gly Leu Ser Arg Ala Leu Leu Met Val Leu Pro Cys 160 150 Pro Leu Leu Ile Lys Arg Leu Pro Tyr Tyr Thr Gly Tyr Ile Ile Pro 170 His Thr Tyr Cys Glu His Met Ala Val Val Lys Leu Ala Ser Ala Asn 180 185 190 Thr Phe Ile Asn Arg Ala Tyr Gly Ile Ser Ala Ala Leu Ser Val Ile 200 Thr Leu Asp Val Trp Leu Ile Ala Ala Ser Tyr Ile Lys Ile Leu Gln 215 220 Ala Val Phe Arg Leu Ser Ser Gln Asn Ala Arg Ser Lys Ala Leu Gly 230 235 240 Thr Cys Ala Ala His Val Cys Thr Ile Leu Ala Phe Tyr Thr Pro Ala 250 245 Leu Phe Ser Phe Leu Thr His Arg Ile Gly Lys Asn Val Pro Pro Ser 265 Val His Ile Ile Leu Ala Ser Met Tyr Leu Leu Val Pro Pro Thr Val

```
280
Asn Pro Leu Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Asp Arg Val
                        295
                                             300
Leu Ser Leu Phe Ser His Leu Lys Ile Ala Glu Tyr
                    310
<210> 1678
<211> 315
<212> PRT
<213> Mus musculus
<400> 1678
Met Gln His Thr Asn His Ser His Gln Asn Pro Ser Ser Phe Leu Leu
                                     10
Met Gly Ile Pro Gly Leu Glu Ala Ser His Phe Trp Ile Ala Phe Pro
            20
Phe Cys Ser Met Tyr Ala Leu Ala Val Leu Gly Asn Met Ala Val Leu
        35
                            40
Leu Val Val Arg Ser Glu Pro Ser Leu His Gln Pro Met Tyr Leu Phe
                        55
Leu Cys Met Leu Ser Thr Ile Asp Leu Ile Leu Cys Thr Ser Thr Val
                    70
                                        75
Pro Lys Leu Leu Ala Leu Phe Trp Ala Asn Ala Ala Glu Ile Ala Phe
                                     90
Gly Ala Cys Ala Thr Gln Met Phe Phe Ile His Gly Phe Ser Ala Val
            100
                                105
                                                     110
Glu Ser Gly Ile Leu Leu Ser Met Ala Phe Asp Arg Tyr Leu Ala Ile
        115
                            120
                                                 125
Cys Arg Pro Leu His Tyr Gly Ser Leu Leu Ser Ser Glu Ser Val Ser
                        135
                                             140
Lys Leu Gly Ala Ala Ala Leu Leu Arg Gly Leu Gly Leu Met Thr Pro
                    150
                                         155
Leu Thr Cys Leu Leu Ala Arg Leu Ser Tyr Cys Gly Arg Val Val Ala
                                     170
His Ser Tyr Cys Glu His Met Ala Val Val Lys Leu Ala Cys Gly Gly
            180
                                185
                                                     190
Thr Gln Pro Asn Asn Ile Tyr Gly Ile Thr Ala Ala Thr Leu Val Val
                            200
                                                 205
Gly Thr Asp Ser Ile Cys Ile Ala Ile Ser Tyr Ala Leu Ile Leu Arg
    210
                        215
                                             220
Ala Val Leu Gly Leu Ser Ser Lys Glu Ala Arg Ala Lys Thr Phe Gly
                    230
                                         235
                                                             240
Thr Cys Gly Ser His Leu Gly Val Ile Leu Leu Phe Tyr Thr Pro Gly
                                     250
                245
Leu Phe Ser Phe Tyr Thr Gln Arg Phe Gly Gln His Val Pro Arg His
            260
                                 265
                                                     270
Val His Ile Leu Leu Ala Asp Leu Tyr Leu Val Val Pro Pro Met Leu
        275
                            280
Asn Pro Ile Ile Tyr Gly Met Lys Thr Lys Gln Ile Arg Asp Gly Ala
                        295
                                             300
Leu Arg Leu Leu Lys Arg Gly Pro Ala Gln Ser
                    310
<210> 1679
<211> 324
```

<212> PRT

<213> Mus musculus

```
<400> 1679
Met Leu Gly Pro Ser Tyr Asn His Thr Met Glu Ser Pro Gly Thr Phe
Phe Leu Leu Gly Ile Pro Gly Phe Gln Ser Ser Tyr Leu Trp Leu Ala
Ile Ser Leu Ser Thr Met Tyr Ser Ile Ala Leu Leu Gly Asn Met Leu
Ile Ile Ile Val Ile Cys Met Asp Ser Thr Leu Gln Glu Pro Met Tyr
Phe Phe Leu Cys Val Leu Ala Ala Val Asp Ile Val Met Ala Ser Ser
Val Val Pro Lys Met Val Ser Ile Phe Ser Ser Gly Asp Ser Ser Ile
Ser Phe Asn Ala Cys Phe Thr Gln Met Tyr Phe Val His Ala Ala Thr
            100
                                105
Ala Val Glu Thr Gly Leu Leu Leu Ala Met Ala Phe Asp Arg Tyr Val
        115
                            120
                                                125
Ala Ile Cys Lys Pro Leu His Tyr Met Arg Ile Leu Thr Arg His Val
                        135
                                            140
Met Leu Gly Ile Ser Val Thr Ile Thr Val Arg Ala Val Ile Phe Met
                    150
                                        155
Thr Pro Leu Ser Trp Met Leu Ser His Leu Pro Phe Cys Ala Ser Asn
                165
                                    170
Val Val Pro His Ser Tyr Cys Glu His Met Ala Val Ala Lys Leu Ala
            180
                                185
                                                    190
Cys Ala Asp Pro Met Pro Ser Ser Leu Tyr Ser Leu Ile Phe Ser Ser
       195
                            200
Ile Ile Val Gly Ser Asp Val Ala Phe Ile Ser Ala Ser Tyr Ser Leu
                        215
                                            220
Ile Leu Lys Ala Val Phe Gly Leu Ser Ser Arg Asn Ala Gln Trp Lys
                    230
                                        235
Ala Leu Ser Thr Cys Gly Ser His Val Gly Val Met Ala Leu Tyr Tyr
                245
                                    250
Leu Pro Gly Met Ala Ser Ile Tyr Val Ala Trp Leu Gly Gln Asp Arg
                                265
Val Pro Leu His Thr Gln Val Leu Leu Ala Asp Leu Tyr Leu Ile Ile
                            280
Pro Pro Thr Leu Asn Pro Ile Ile Tyr Gly Ile Arg Thr Arg Gln Ile
                        295
                                            300
Arg Glu Arg Ile Trp Ser Leu Leu Thr His Cys Phe Phe Ser Gln Cys
                    310
                                        315
Thr Gln Gly Ser
```

```
<210> 1680
<211> 308
<212> PRT
```

<213> Mus musculus

<400> 1680

Met Gln Leu Asn Ile Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr 1 5 10 10 15 Gln Asp Pro Ser Arg Lys Asn Ile Val Phe Ala Ile Phe Leu Phe Phe 20 25 30 Tyr Met Gly Thr Leu Leu Gly Asn Phe Leu Ile Ile Val Thr Ile Lys 35 40 45 Thr Ser Pro Ala Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu

```
55
Ser Leu Ser Asp Thr Cys Phe Ser Thr Thr Val Ala Pro Arg Thr Ile
                    70
                                        75
Val Asp Ser Leu Leu Lys Glu Ala Ser Ile Ser Phe Asn Glu Cys Ile
                85
                                     90
                                                         95
Ile Gln Val Phe Thr Phe His Leu Phe Gly Ser Leu Glu Ile Phe Ile
                                105
Leu Ile Leu Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
His Tyr Met Thr Ile Met Asn Arg Gln Val Cys Gly Met Leu Val Ala
    130
                        135
                                            140
Thr Val Cys Val Gly Ser Cys Ile His Ser Ser Val Gln Ile Ile Leu
                    150
                                        155
Ala Leu Ser Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Phe
                                                         175
                165
                                     170
Cys Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Val
                                185
                                                     190
Ile Asn Leu Leu Leu Val Ser Asn Ser Gly Thr Leu Cys Thr Val Ser
                            200
                                                 205
        195
Phe Leu Met Leu Met Val Ser Tyr Ile Ile Ile Leu Tyr Ser Leu Arg
                                             220
Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Phe Thr Cys Val Ser
                    230
                                         235
His Ile Ile Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Ile Tyr
                                     250
Thr Arg Pro Ala Thr Thr Phe Pro Met Asp Lys Met Ile Ser Val Phe
                                 265
                                                     270
Tyr Thr Ile Cys Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                 285
Asn Ala Glu Val Lys Asn Ala Met Arg Lys Leu Trp Ser Lys Lys Ile
                                             300
Ser Asp Asp Ile
305
<210> 1681
<211> 312
<212> PRT
<213> Mus musculus
<400> 1681
Met Ala Asp Val Asn Phe Thr Phe Val Thr Glu Phe Ile Leu Leu Gly
                                     10
Leu Thr Asp Arg Asp Glu Leu Lys Val Phe Leu Phe Ile Leu Phe Leu
Leu Ile Tyr Val Ile Ser Leu Val Gly Asn Leu Gly Met Phe Met Leu
        35
Ile His Ile Thr Pro Lys Leu His Thr Pro Met Tyr His Phe Leu Arg
                                             60
Ser Leu Ser Phe Val Asp Ala Cys Tyr Ser Ser Val Phe Ala Pro Thr
                    70
                                         75
Leu Leu Leu Asn Phe Phe Val Glu Lys Glu Thr Ile Ser Phe Ser Ala
                                     90
Cys Ile Leu Gln Tyr Phe Leu Phe Ala Ser Leu Leu Thr Thr Glu Gly
                                105
                                                     110
```

Phe Leu Leu Ala Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Val Asn 120

Pro Leu Thr Tyr Thr Val Val Met Thr Lys Leu Ile Cys Val Leu Leu

135

125

```
Val Leu Gly Ser Cys Leu Gly Gly Thr Ile Thr Ser Leu Thr His Thr
                    150
Ile Gly Leu Ile Lys Leu Ser Phe Cys Gly Pro Asn Val Ile Ser His
                165
                                    170
Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
                                185
Ser Met Asn Glu Leu Leu Leu Val Phe Ser Gly Val Ile Ala Ile
                            200
                                                205
Thr Thr Leu Leu Thr Val Val Leu Ser Tyr Ile Phe Ile Val Ala Ala
                        215
                                            220
Ile Leu Arg Ile Arg Ser Ala Ala Gly Arg His Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Ser Ile Ser
                245
                                    250
Phe Ser Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Leu Glu Gln Glu Lys
            260
                                265
Val Val Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Val Lys Arg Val
                        295
                                           300
Met Glu Ile Lys His Ser Leu His
                    310
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1682

Met Ile Thr Ser Asn Val Ser Ser Tyr Asn Pro Gly Pro Phe Leu Leu Val Gly Ile Pro Gly Leu Glu His Phe His Val Trp Ile Gly Ile Pro Phe Cys Val Ile Tyr Ile Ile Ala Val Val Gly Asn Cys Ile Leu Leu Tyr Leu Ile Thr Val Glu Arg Ser Leu His Glu Pro Met Phe Phe Phe 55 Leu Ser Met Leu Ala Met Thr Asp Leu Ile Leu Ser Thr Asp Gly Val 70 75 Pro Lys Thr Leu Ser Ile Phe Trp Met Gly Ala Arg Glu Ile Thr Phe 85 90 Pro Gly Cys Leu Thr Gln Met Phe Phe Leu His Tyr Ser Phe Val Leu 100 105 Asp Ser Ala Ile Leu Met Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 120 125 Cys Ser Pro Leu Arg Tyr Ala Thr Ile Leu Thr Pro Lys Thr Ile Val 135 Lys Ile Ala Val Gly Ile Ser Phe Arg Ser Phe Cys Ile Ile Leu Pro 150 155 Val Val Phe Leu Leu Thr Arg Leu Pro Phe Cys Arg Thr Arg Ile Ile 170 Pro His Thr Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ala Cys Ala 180 185 190 Asp Ile Ser Ile Asn Ile Trp Tyr Gly Phe Cys Val Pro Ile Met Thr 200 205 Val Ile Ser Asp Val Val Leu Ile Ala Val Ser Tyr Thr Leu Ile Leu 220 215 Cys Ala Val Phe Arg Leu Pro Ser Arg Asp Ala Arg Gln Lys Ala Leu

```
230
                                         235
Gly Thr Cys Gly Ser His Val Cys Val Ile Leu Met Phe Tyr Thr Pro
                245
                                    250
Ala Phe Phe Ser Ile Leu Ala His Arg Phe Gly His Asn Val Ser Leu
                                                     270
            260
                                265
Thr Phe His Ile Met Phe Ala Asn Leu Tyr Ile Val Ile Pro Pro Ala
                            280
Met Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Lys
                        295
                                             300
Val Ile Leu Leu Phe Ser Val Lys Ser Ile Asp Gly
                    310
<210> 1683
<211> 320
<212> PRT
<213> Mus musculus
<400> 1683
Met Gly Thr Lys His Ala Thr Asn Ser Ser Glu Phe Gln Val Ser Glu
                                     10
Phe Ile Leu Leu Gly Phe Pro Gly Ile His Glu Phe Gln Ile Trp Leu
Ser Leu Pro Met Ala Leu Leu Tyr Ile Ile Ala Leu Gly Ala Asn Phe
                            40
                                                 45
Leu Ile Leu Ile Thr Ile Tyr Leu Glu Pro Asn Leu His Gln Ser Met
                        55
Tyr Gln Phe Leu Gly Ile Leu Ala Val Val Asp Ile Gly Leu Ala Thr
                    70
                                         75
Thr Ser Met Pro Lys Ile Leu Ala Ile Leu Trp Phe Asp Ala Lys Thr
                                     90
Ile Ser Leu Pro Glu Cys Phe Ala Gln Ile Tyr Ala Ile His Thr Phe
Met Ser Met Glu Ser Gly Val Phe Leu Cys Met Ala Ile Asp Arg Tyr
                            120
Val Ala Ile Cys Tyr Pro Leu Gln Tyr Pro Ser Ile Val Thr Glu Ala
                        135
Phe Val Ile Lys Ala Thr Leu Ser Met Met Leu Arg Ser Gly Leu Leu
                    150
Thr Ile Pro Val Pro Val Leu Ala Ala Gln Arg Gln Tyr Cys Ser Arg
                                     170
Asn Glu Ile Asp His Cys Leu Cys Ser Asn Leu Gly Val Ile Ser Leu
                                 185
                                                     190
            180
Ala Cys Asp Asp Ile Thr Val Asn Arg Asn Cys Gln Leu Thr Leu Ala
        195
                            200
Trp Leu Ile Leu Gly Ile Asp Met Ile Leu Val Cys Val Ser Tyr Ala
                        215
                                             220
Leu Ile Ile Arg Ser Val Leu Arg Leu Asn Ser Thr Glu Ala Val Ser
                    230
                                         235
Lys Ala Leu Ser Thr Cys Ser Ser His Leu Ile Leu Ile Met Phe Tyr
                                     250
Tyr Thr Ala Ile Val Ile Leu Ser Val Thr His Leu Ala Gly Arg Arg
                                 265
                                                     270
Val Pro Leu Ile Pro Val Leu Leu Asn Val Met His Ile Val Ile Pro
                            280
                                                 285
Pro Ser Leu Asn Pro Met Val Tyr Ala Leu Arg Thr Gln Glu Leu Lys
                        295
                                             300
Val Gly Phe Arg Lys Val Phe Asp Leu Ser His Tyr Val Ser Arg Lys
                    310
                                         315
```

```
<210> 1684
<211> 310
<212> PRT
<213> Mus musculus
<400> 1684
Met Thr Ala Lys Asn Ser Ser Val Thr Glu Phe Ile Leu Ala Gly Leu
Thr Asn Gln Pro Gly Leu Arg Met Pro Leu Phe Phe Leu Phe Leu Gly
                                25
Phe Tyr Met Val Thr Val Val Gly Asn Leu Gly Leu Ile Ser Leu Ile
                            40
Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
Leu Ser Val Ile Asp Phe Cys Tyr Ser Ser Thr Ile Ile Pro Lys Met
                    70
Leu Thr Ser Phe Ile Ser Lys Thr Asn Ile Ile Ser His Ser Gly Cys
                                                         95
Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Phe Ser Glu Ser Phe
                                105
Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
        115
                            120
Leu Met Tyr Thr Val Thr Met Ser Pro Gln Val Cys Leu Leu Leu Leu
                        135
                                            140
Leu Gly Val Tyr Val Met Gly Phe Ser Gly Gly Ile Ala His Thr Gly
                                        155
                    150
Asn Leu Met Asn Leu Thr Phe Cys Ala Asp Asn Leu Ile Asn His Phe
                                    170
                165
Met Cys Asp Ile Leu Pro Leu Leu Glu Leu Ser Cys Ser Asn Thr Phe
            180
                                185
Thr Asn Glu Leu Val Val Phe Ile Val Val Ala Phe Gly Ile Gly Val
        195
                            200
Pro Ile Val Thr Ile Phe Ile Ser Tyr Ala Leu Ile Leu Ser Ser Ile
                        215
                                            220
Leu Tyr Met His Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                                        235
                    230
Ser Ser His Leu Ile Val Val Cys Leu Phe Phe Gly Ser Gly Ala Phe
                245
                                    250
Met Tyr Leu Lys Pro Pro Ser Ile Leu Pro Leu Asp Gln Gly Lys Val
                                                     270
            260
                                265
Ser Ser Leu Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr Leu
                        295
Gly Lys Arg Ile Leu Ser
305
<210> 1685
<211> 319
<212> PRT
<213> Mus musculus
<400> 1685
Met Phe Gln Ile Leu Arg Asp Ser Asn Ser Ser Arg Phe Gln Val Ser
                                    10
Glu Phe Ile Leu Met Gly Phe Pro Gly Ile His Ser Trp Gln His Trp
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Leu Ser Leu Pro Leu Ala Leu Leu Tyr Val Leu Ala Leu Ile Ala Asn
Ile Leu Ile Val Thr Val Ile Tyr Gln Glu Ala Ser Leu His Gln Pro
                        55
Met Tyr His Phe Leu Gly Ile Leu Ala Ile Val Asp Val Gly Leu Ala
                    70
                                        75
Thr Thr Ile Met Pro Lys Ile Leu Ala Ile Leu Trp Phe Asn Asp Asn
                                    90
Asn Ile Ser Leu Pro Glu Cys Phe Ala Gln Met Tyr Ala Ile His Cys
                                105
Phe Val Ala Met Glu Ser Gly Ile Phe Val Cys Met Ala Ile Asp Arg
                            120
Tyr Val Ala Ile Cys Lys Pro Leu Arg Tyr Ser Ser Ile Val Thr Glu
                        135
Ser Phe Val Val Lys Ala Thr Val Ile Met Ala Ile' Arg Asn Phe Val
                    150
                                        155
Ala Pro Met Ser Val Pro Val Leu Ala Ala Gln Arg Asn Tyr Cys Phe
                                    170
Gln Asn Lys Ile Glu His Cys Leu Cys Ser Asn Leu Gly Val Thr Ser
                                185
Leu Ala Cys Asp Asp Arg Lys Ile Asn Ser Ile Asn Gln Leu Phe Leu
                            200
Ala Trp Thr Leu Met Gly Ser Asp Leu Ala Leu Ile Met Ile Ser Tyr
                        215
Ala Leu Ile Leu Arg Ser Val Leu Arg Leu Asn Ser Ala Glu Ala Ala
                    230
                                        235
Ser Lys Ala Leu Ser Thr Cys Thr Ser His Leu Ile Leu Ile Phe Phe
                                    250
Phe Tyr Thr Val Ile Val Val Ile Ser Ile Thr His Ser Val Gly Ile
Lys Ile Pro Leu Ile Pro Val Leu Leu Asn Val Leu His Asn Val Ile
                            280
Pro Pro Ala Leu Asn Pro Met Val Tyr Ala Leu Lys Asn Lys Glu Leu
                        295
                                             300
Lys Gln Gly Leu Tyr Lys Val Leu Arg Leu Asp Val Lys Glu Gly
                    310
<210> 1686
<211> 306
<212> PRT
<213> Mus musculus
<400> 1686
Met Glu Lys Gly Asn Gln Ser Thr Val Asn Lys Phe Phe Leu Ser Gly
Leu Thr Glu Gln Pro Glu Leu Gln Leu Pro Leu Phe Leu Phe Leu
Gly Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu
                            40
Ile Leu Leu Ser Ser Tyr Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Ile Thr Pro Lys
                    70
                                        75
                                                             80
Met Leu Val Lys Phe Val Arg Glu Lys Asn Glu Ile Ser Tyr Pro Glu
```

90

110

Cys Ile Thr Gln Leu Cys Phe Phe Val Ile Phe Ala Val Ser Glu Ser

105

```
Tyr Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
Pro Leu Leu Tyr Ser Ser Ile Met Ser Gln His Lys Cys Leu Ser Leu
Val Leu Gly Val Tyr Ile Leu Gly Ile Val Cys Ala Ser Ala His Val
                    150
                                        155
Gly Cys Ile Phe Arg Ile Asp Phe Cys Lys Ser Asp Leu Ile Asn His
                                    170
               165
Tyr Phe Cys Asp Leu Ile Ser Ile Leu Asn Leu Ser Cys Ser Asn Ile
           180
                                185
Phe Val Asn Asp Leu Val Ile Leu Ile Phe Ser Leu Ile Asn Thr Ile
        195
                            200
Phe Pro Thr Leu Thr Ile Leu Ser Ser Tyr Ala Phe Ile Ile Ile Ser
                        215
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                                        235
                    230
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Tyr Ile Ser Ala Gly
                245
                                    250
Phe Thr Tyr Leu Asn Pro Ser Ser Ser His Ser Met Asp Glu Gly Lys
                                265
Val Ser Ser Ile Phe Tyr Thr Ile Ile Val Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Lys Lys Met
Ile Glu
305
```

<211> 308

<212> PRT

<213> Mus musculus

<400> 1687

Met Glu Gln Gly Asn His Ser Thr Val Lys Lys Phe Phe Leu Ser Gly 10 Leu Thr Glu Gln Pro Glu Leu Gln Leu Pro Leu Phe Leu Phe Leu 20 25 Gly Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu 45 40 Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 60 Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Thr Val Ile Thr Pro Lys 70 75 Met Leu Val Asn Phe Val Arg Glu Lys Asn Glu Ile Ser Tyr Pro Glu 90 Cys Ile Thr Gln Leu Tyr Phe Phe Leu Leu Phe Ala Ile Ser Glu Cys 100 105 110 Tyr Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser 120 125 Pro Leu Leu Tyr Ser Ser Ile Met Ser Gln His Lys Cys Leu Ser Ile 130 135 140 Val Leu Gly Val Tyr Ile Ile Gly Ile Val Cys Ala Ser Ala His Val 150 155 Gly Cys Met Phe Arg Ile Asp Phe Cys Arg Tyr Asp Val Ile Asn His 170 175 Tyr Phe Cys Asp Leu Ile Ser Ile Leu Lys Leu Ser Cys Ser Asp Ala 185 Phe Val Asn Glu Leu Met Ile Leu Ile Phe Ser Gly Val Asn Ile Ile

```
200
Ala Pro Thr Leu Thr Ile Leu Ser Ser Tyr Val Phe Ile Ile Met Ser
                                            220
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Ser Lys Thr Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ser Ala Val Ala Val Phe Tyr Gly Ser Ala Ala
                                    250
Phe Met Tyr Leu Asn Pro Ser Ser Ser Asn Ser Met Asp Glu Gly Lys
                                265
Val Ser Ser Ile Phe Tyr Thr Ile Ile Val Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Asn Ile Ala Leu Lys Lys Met
Ile Gln Arg Arg
305
<210> 1688
```

<210> 1688 <211> 311 <212> PRT <213> Mus musculus

<400> 1688 Met Ala Glu Gly Asn Phe Ser Val Val Thr Glu Phe Ile Leu Thr Gly 10 Leu Thr Glu Lys Pro Ala Leu Gln Leu Pro Leu Phe Leu Phe Leu 20 25 Gly Ile Tyr Val Val Thr Val Ile Gly Asn Leu Gly Met Val Met Leu 35 45 40 Ile Leu Phe Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Val Asp Leu Cys Gln Ser Ser Val Ile Met Pro Lys 70 75 Met Leu Glu Lys Phe Val Met Val Lys Ser Val Ile Ser Tyr Ala Glu 85 90 Cys Met Ala Gln Phe Tyr Leu Phe Asp Val Phe Ala Val Ser Glu Cys 105 His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Lys Val Cys Ser Trp Met 135 140 Val Val Gly Val Tyr Ser Val Gly Leu Ile Cys Ala Thr Gly Glu Thr 150 155 Val Cys Leu Leu Arg Leu Leu Phe Cys Lys Ala Gly Asp Ile Asn His 170 165 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Glu Gln Ser Cys Ser Asn Thr 180 190 185 Phe Ile Asn Glu Ile Leu Gly Leu Ser Phe Ser Ser Phe Asn Ile Thr 200 Val Pro Ala Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Ala Ser 215 220 Ile Leu Arg Ile Pro Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr 235 230 Cys Ser Ser His Ile Leu Ala Val Ala Val Phe Phe Gly Ser Leu Ala 250 Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys 265 Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu 280

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Val Gly Arg Arg Glu Phe Met
<210> 1689
<211> 308
<212> PRT
<213> Mus musculus
<400> 1689
Met Glu Lys Ser Asn Asp Ser Ser Glu Tyr Gly Phe Ile Leu Glu Gly
Phe Ser Asp Arg Pro Arg Leu Glu Met Val Leu Phe Ile Val Asn Phe
           20
Thr Leu Tyr Ser Val Ala Val Leu Gly Asn Ile Thr Ile Ile Leu Val
                            40
Cys Ile Leu Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Asn Leu Ser Phe Leu Asp Leu Cys Phe Ser Thr Ser Cys Ile Pro Gln
                   70
                                        75
Met Leu Val Asn Leu Trp Gly Pro Asp Lys Thr Ile Ser Tyr Ala Gly
                                    90
               85
Cys Val Val Gln Leu Phe Ser Phe Leu Ser Ile Gly Ser Val Glu Cys
                                105
           100
Ile Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys
                            120
       115
Pro Leu His Tyr Met Val Ile Met His Pro Gln Leu Cys Val Arg Leu
                        135
                                            140
Met Ala Val Ala Trp Gly Val Gly Leu Ala Asn Ala Ile Ile Met Ser
                   150
                                        155
Pro Leu Ala Met Thr Leu Ser Arg Cys Gly Arg Arg Ile Asn His
                                    170
               165
Phe Leu Cys Glu Met Pro Ala Leu Ile Lys Met Ala Cys Val Asp Ala
           180
                                185
                                                    190
Arg Pro Val Glu Met Leu Ser Phe Thr Leu Ala Ile Leu Ile Val Leu
                            200
       195
Leu Pro Leu Thr Leu Ile Leu Val Ser Tyr Gly Tyr Ile Ala Ala Ala
                        215
                                            220
Val Leu Arg Ile Lys Ser Ala Ala Gly Arg Trp Lys Ala Phe Asn Thr
                    230
                                        235
Cys Ser Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ser Ile Ile
                                    250
               245
Tyr Met Tyr Met Gln Pro Gly Asn Ser Ser Ser Gln Asp Gln Gly Lys
            260
                                265
Phe Leu Thr Leu Phe Tyr Asn Leu Val Thr Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Met Lys Gly Ala Leu Lys Lys Val
   290
                        295
Cys Gly Arg His
305
<210> 1690
<211> 316
<212> PRT
<213> Mus musculus
```

Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Phe Tyr Lys Val

```
<400> 1690
Met Gly Ile Leu Lys Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile
Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Lys Val Val Leu Phe Thr
                                25
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
                        55
Phe Leu Ser His Leu Ala Ser Val Asp Ile Gly Ile Ser Ser Ser Val
                                        75
Thr Pro Asn Met Leu Val Asn Phe Leu Leu Glu Arg Ser Thr Ile Ser
                                    90
Tyr Leu Gly Cys Gly Ile Gln Leu Gly Ser Gly Ala Phe Phe Gly Ser
                                105
            100
Thr Glu Ser Phe Leu Leu Ala Ala Met Ala Tyr Asp His Phe Met Ala
                            120
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys
                        135
                                             140
Ile Gln Leu Leu Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser
                    150
                                        155
Ser Phe Ile Leu Ser Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn Lys
                                    170
Val Asn His Phe Phe Cys Asp Phe Thr Pro Leu Val Glu Leu Ser Cys
Ser Asp Asn Ser Val Leu Leu Ile Leu Asp Ser Phe Ser Ala Gly Ser
                            200
        195
Ile Ile Val Ile Thr Val Leu Val Ile Ala Ile Ser Tyr Thr Tyr Ile
                        215
Leu Ile Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg His Lys Ala
                    230
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Val Phe Tyr Gly
                245
Thr Val Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp
Gln Asn Lys Val Leu Ser Val Phe Tyr Met Ile Ala Ile Ala Ile Pro
                            280
Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Asn
                        295
Ala Leu Lys Arg Gln Leu Ser Lys Lys Thr Phe Ser
<210> 1691
<211> 314
<212> PRT
<213> Mus musculus
<400> 1691
Met Leu Met Gly Gly Ala Asn Leu Ser Val Val Ser Glu Phe Val Phe
                                    10
Leu Gly Leu Thr Asn Ser Trp Asp Ile Gln Leu Leu Phe Val Phe
            20
                                25
Ser Ser Val Phe Tyr Val Ala Ser Met Met Gly Asn Ser Leu Ile Ile
                            40
Phe Thr Val Ala Ser Asp Pro His Leu His Thr Pro Met Tyr Phe Leu
```

55

Leu Ala Asn Leu Ser Phe Ile Asp Leu Gly Val Ser Ser Val Thr Ser

```
Pro Lys Met Ile Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Phe
Thr Gly Cys Val Ile Gln Ile Phe Ser Ile His Val Ile Gly Gly Val
                                105
Glu Met Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
                            120
Cys Lys Pro Leu His Tyr Leu Thr Ile Leu Ser Pro Arg Met Cys Leu
                        135
Phe Phe Val Val Ile Ala Trp Ile Val Gly Leu Ile His Ser Leu Ala
                    150
Gln Leu Val Phe Val Ile Asn Leu Pro Phe Cys Gly Pro Asn Val Leu
                                    170
               165
Asp Ser Phe Tyr Cys Asp Leu Pro Arg Phe Ile Lys Leu Ala Cys Val
            180
                                185
Asp Thr His Lys Leu Glu Phe Met Val Thr Ala Asn Ser Gly Phe Ile
                            200
       195
Ser Val Gly Ser Phe Phe Ile Leu Ile Val Ser Tyr Ile Val Ile Ile
                        215
                                            220
Ile Ser Val Gln Lys His Ser Ser Gly Gly Phe Ser Lys Ala Leu Ser
                    230
                                        235
Thr Leu Ser Ala His Ile Ser Val Val Leu Phe Phe Gly Pro Leu
                245
                                    250
Ile Phe Val Tyr Thr Trp Pro Thr Pro Ser Val His Leu Asp Lys Phe
            260
                                265
Leu Ala Ile Phe Asp Ala Val Ile Thr Pro Phe Leu Asn Pro Val Ile
                            280
Tyr Thr Phe Arg Asn Gln Glu Met Lys Met Ala Met Lys Arg Val Phe
                        295
Lys Gln Leu Leu Ser Tyr Arg Lys Ile Ser
                    310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1692

Met Ala Gly Arg Asn Tyr Thr Phe Val Thr Glu Phe Phe Leu Thr Ala Phe Thr Glu His Pro Glu Trp Gly Leu Pro Leu Phe Leu Leu Phe Leu Ser Phe Tyr Leu Ala Thr Leu Leu Gly Asn Thr Gly Met Ile Ile Leu 35 Ile Gln Lys Asn Arg Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ser Phe Val Asp Ile Cys Tyr Ser Ser Val Ile Ile Pro Gln 70 Met Leu Ala Val Leu Trp Glu His Gly Ser Thr Ile Ser Gln Val Arg 90 Cys Ala Val Gln Phe Phe Leu Phe Thr Phe Phe Ala Ser Ile Asp Cys 105 Tyr Leu Leu Ala Ile Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Gln 120 Pro Leu Leu Tyr Val Thr Ile Met Thr Glu Lys Ala Arg Val Gly Leu 140 Val Thr Gly Ala Tyr Val Ala Gly Phe Ser Ser Gly Phe Ile Arg Thr 155 Val Thr Ala Phe Thr Leu Ser Phe Cys Gly Asn Asn Glu Ile Asn Phe

```
165
                                    170
Ile Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Val Cys Gly Asp Ser
                                                    190
                                185
Tyr Ile Gln Glu Val Val Ile Ile Val Phe Ala Ile Phe Val Met Pro
        195
                            200
Ala Cys Ile Val Val Ile Ser Val Ser Tyr Leu Phe Ile Ile Val Ala
    210
                        215
                                            220
Ile Met Gln Ile Arg Ser Ala Gly Gly Arg Ala Lys Thr Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Ala Val Ala Leu Phe Phe Gly Thr Leu Ile
                245
                                    250
Phe Met Tyr Leu Arg Asp Asn Thr Asp Gln Phe Ser Glu Arg Asp Arg
            260
                                265
Val Val Ser Val Phe Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Ile Thr Lys Ser
                        295
Leu Arg Arg Ser Lys Ile Ser Arg Ala Pro
                    310
<210> 1693
<211> 329
<212> PRT
<213> Mus musculus
<400> 1693
Met Ile Ser Phe Asn Ile Arg Arg Ile Phe Val Val Ser Met Thr Trp
               5
                                    10
Glu Asn His Ser Val Leu Met Glu Phe Val Phe Leu Ala Tyr Pro Asn
            20
                                25
Arg Leu Glu Leu Arg Met Phe Cys Phe Leu Gly Ile Ser Leu Ala Tyr
                            40
Ala Leu Ile Ile Ser Gly Asn Ile Leu Ile Met Val Ser Ile Gln Thr
                        55
Glu Thr Arg Leu His Ser Pro Met Tyr Tyr Phe Leu Gly Ser Leu Ser
                                        75
Gly Ile Glu Leu Cys Tyr Thr Ala Val Val Pro His Ile Leu Ala
                85
                                    90
Asn Thr Leu Lys Ser Glu Lys Asn Ile Thr Leu Leu Ser Cys Ala Thr
            100
                                105
                                                    110
Gln Met Val Phe Phe Ile Gly Leu Gly Ser Ala Asp Cys Phe Leu Leu
                            120
                                                125
Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Gln
                        135
                                            140
Tyr Pro Leu Ile Met Thr Val Thr Leu Cys Val Arg Leu Val Leu Ala
                    150
                                        155
Ser Val Val Ile Gly Leu Val Leu Ser Leu Gln Leu Val Val Phe Ile
                                    170
Phe Cys Leu Pro Phe Cys Gln Asp Arg Gly Ile Glu His Phe Phe Cys
            180
                                185
                                                    190
Asp Val Pro Pro Val Met Arg Leu Val Cys Ala Thr Ser His Ile His
                            200
Glu Leu Ser Val Leu Val Ala Ala Ala Leu Ala Ile Ala Val Pro Phe
                        215
                                            220
Phe Phe Ile Ala Thr Thr Tyr Ala Leu Ile Val Ala Ala Val Leu Lys
                                        235
Leu His Ser Ala Ala Gly Arg His Arg Ala Phe Asn Thr Cys Ser Ser
                                    250
                                                        255
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His Leu Thr Val Val Leu Leu Gln Tyr Gly Cys Cys Ala Phe Met Tyr
Leu Arg Pro Asn Ser Ser Tyr His Pro Lys Lys Asp Gln Phe Ile Ser
                            280
Leu Val Tyr Thr Leu Gly Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr
Leu Arg Asn Asn Glu Met Lys Gly Ala Ile Glu Lys Val Leu Thr Arg
Asn Tyr Phe Ser Gln Lys Asn Ile Gln
```

<210> 1694 <211> 314 <212> PRT <213> Mus musculus

<400> 1694 Met Ala Phe Leu Glu Asp Gly Asn His Thr Ala Val Thr Gly Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Val Leu Phe Val 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr 40 Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Ala Asp Ile Gly Tyr Ser Ser Val Thr Pro Asn Met Leu Val Asn Phe Leu Val Glu Arg Asn Thr Ile Ser Tyr Leu Gly Cys Gly Ile Gln Leu Gly Ser Ala Val Phe Phe Gly Thr 100 105 110 Val Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala 115 120 125 Ile Cys Ser Pro Leu Leu Tyr Ser Asn Lys Met Ser Thr Gln Val Cys 135 140 Val Gln Leu Leu Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser 150 155 Ser Phe Thr Leu Ser Phe Phe Ser Leu Val Phe Cys Gly Pro Asn Arg 170 Val Asn His Phe Phe Cys Asp Phe Ala Pro Leu Val Lys Leu Ser Cys 180 185 190 Ser Asp Val Ser Val Pro Ala Val Val Pro Ser Phe Thr Ala Gly Ser 195 200 205 Ile Ile Ile Val Thr Ile Phe Val Ile Ala Val Ser Tyr Ile Tyr Ile 215 220 Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala 230 235 Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly 250 Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp 265 Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Val Pro Met Leu 280 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Gly Ala Leu 295 Lys Arg Gln Leu Ala Lys Asn Thr Phe Ser 310

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<211> 314
<212> PRT
<213> Mus musculus
<400> 1695
Met Ala Phe Leu Glu Val Gly Asn His Thr Ala Val Thr Glu Phe Ile
1
Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Val Leu Phe Thr
                                25
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Met Gly Asn Leu Ser Thr
                            40
Ile Leu Leu Ile Arq Val Ser Ser Gln Leu His His Pro Met Tyr Phe
                        55
Phe Leu Ser His Leu Ala Ser Val Asp Met Gly Leu Ser Ser Val
                                        75
Thr Pro Asn Met Leu Leu Asn Phe Leu Ile Glu Arg Asn Thr Ile Ser
                                    90
Tyr Leu Gly Cys Gly Ile Gln Gln Ser Leu Ala Asp Phe Phe Gly Ser
            100
                                105
                                                     110
Val Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Met Ala
        115
                            120
                                                 125
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Lys Val Cys
    130
                        135
                                            140
Val Gln Leu Val Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser
                    150
                                        155
Leu Ile Met Phe Tyr Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn Arg
                165
                                    170
Val Asp His Phe Phe Cys Asp Phe Ala Pro Leu Val Glu Leu Ser Cys
                                185
                                                     190
Ser Asp Val Ser Val Ser Val Ile Val Ile Ser Phe Ser Ala Gly Ser
        195
                            200
                                                 205
Val Thr Met Ile Thr Val Phe Val Ile Ala Val Ser Tyr Ser Tyr Ile
                        215
                                             220
Leu Ile Thr Ile Leu Lys Met His Ser Ile Glu Gly Arg His Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly
                                    250
Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr Asp
                                265
Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Met Ile Pro Met Leu
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Ile
                        295
Lys Arg Gln Leu Gly Lys Lys Met Ser Cys
                    310
<210> 1696
<211> 314
<212> PRT
<213> Mus musculus
<400> 1696
Met Ala Phe Leu Gln Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile
1
                                    10
Leu Leu Gly Leu Thr Asp Gly Pro Ile Leu Arg Val Ile Leu Phe Thr
            20
                                25
                                                     30
```

```
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
Phe Leu Ser His Leu Ala Ser Val Asp Met Gly Leu Ser Ser Val
Thr Pro Asn Met Leu Val Asn Phe Leu Val Lys Gln Asn Thr Ile Ser
Tyr Ile Ala Cys Ser Ile Gln Phe Gly Leu Ala Ala Phe Phe Gly Thr
                                105
Val Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Val Ala
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Ile Ser Thr Glu Ser Cys
                        135
                                            140
Ile Gln Leu Val Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser
                    150
                                        155
Ser Phe Ile Leu Ser Phe Phe Ser Phe Ile Phe Cys Gly Pro Asn Arg
                                    170
Ile Asn His Phe Tyr Cys Asp Leu Ala Pro Leu Val Glu Leu Ser Cys
                                185
Ser Asp Val Ser Val Ser Val Val Thr Ser Phe Ser Ala Gly Ser
                            200
Val Thr Val Ile Thr Val Phe Val Ile Ala Val Ser Tyr Ser Tyr Ile
                        215
Leu Ile Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg His Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly
                                    250
Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp
Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Ile
                        295
Lys Arg Gln Leu Gly Lys Lys Met Phe Cys
                    310
```

<210> 1697 <211> 310

<212> PRT

<213> Mus musculus

<400> 1697

 Met
 Glu
 Pro
 Gly
 Asn
 His
 Thr
 Ala
 Val
 Thr
 Lys
 Phe
 Ile
 Leu
 Leu
 Gly

 Leu
 Thr
 Asp
 Pro
 Thr
 Leu
 Cys
 Val
 Ile
 Phe
 Phe
 Val
 Phe
 Phe
 Phe
 Phe
 Phe
 Phe
 Phe
 Leu
 Gly
 Phe
 Phe
 Phe
 Leu
 Gly
 Asn
 Ile
 Ser
 Ile
 Ile
 Asn
 Leu
 Asn
 Ile
 Ser
 Ile
 Asn
 Leu
 Asn
 Ile
 Ser
 Ile
 Asn
 Leu
 Ile
 Ile

```
120
Pro Leu Leu Tyr Ser Thr His Met Ser Ser Gln Ile Cys Leu Leu Leu
                        135
                                            140
Val Gly Ala Ser Tyr Val Gly Gly Cys Val Asn Ala Trp Thr Phe Thr
                    150
                                        155
Gly Cys Leu Leu Ser Leu Ser Phe Cys Gly Pro Asn Lys Ile Asp His
                165
                                    170
                                                        175
Phe Phe Cys Asp Phe Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
            180
                                185
                                                    190
Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ala Gly Ser Ile Ile Val
                            200
Val Thr Val Phe Val Ile Ser Val Ser Tyr Ile Tyr Ile Leu Ile Thr
                        215
                                            220
Ile Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr
                245
                                    250
Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Lys Gln Asn Arg
                                265
Val Val Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Glu Ala Leu Arg Lys Ala
                        295
Thr Leu Arg Ile Tyr Ser
<210> 1698
<211> 315
<212> PRT
<213> Mus musculus
<400> 1698
Met Ala Phe Leu Gln Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile
                                    10
Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Val Leu Phe Thr
                                25
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Phe Gly Asn Leu Ser Thr
                            40
Ile Leu Leu Ile Arq Val Ser Ser Gln Leu His His Pro Met Tyr Phe
Phe Leu Ser His Leu Ala Ser Val Asp Ile Gly Ile Ser Ser Ser Val
                                        75
Thr Pro Ser Met Leu Val Asn Phe Leu Leu Glu Arg Ser Thr Ile Ser
Tyr Leu Gly Cys Gly Ile Gln Leu Gly Ser Ala Asp Phe Ile Ala Ser
            100
                                105
Val Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Met Ala
                            120
                                                 125
Val Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys
                                            140
Val Gln Leu Val Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser
                    150
                                        155
Leu Ile Val Thr Val Tyr Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn
```

170

Arg Ile Asp His Phe Phe Cys Asp Phe Ala Pro Leu Ala Glu Leu Ser 185

Cys Ser Asp Val Ser Val Ser Val Leu Ile Ile Ser Phe Ser Ala Gly 200

180

175

190

```
Ser Val Thr Met Ile Thr Val Phe Val Ile Val Ile Ser Tyr Ser Tyr
                        215
                                             220
Ile Leu Ile Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg His Lys
                    230
                                        235
Ala Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr
                245
                                    250
                                                         255
Gly Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr
            260
                                265
                                                     270
Asp Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Met Ile Pro Met
                            280
Leu Asn Pro Leu Ile Tyr Ser Leu Ser Asn Asn Glu Ile Lys Gly Ala
                        295
Leu Lys Arg Gln Leu Gly Met Lys Thr Leu Ser
                    310
```

<210> 1699 <211> 314 <212> PRT

<213> Mus musculus

<400> 1699 Met Ala Phe Gln Glu Asp Gly Asn His Thr Ala Val Thr Glu Phe Val Leu Phe Gly Leu Thr Asp Asp Pro Val Leu Arg Val Ile Leu Phe Ile Ile Phe Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe Phe Leu Ser His Leu Ala Phe Ala Asp Ile Gly Tyr Ser Ser Val Thr Pro Asn Met Leu Val Asn Phe Leu Val Glu Arg His Thr Ile Ser Tyr Ile Gly Cys Ala Ile Gln Leu Gly Ser Val Val Phe Phe Gly Ser Ser Glu Cys Phe Ile Leu Ala Ala Met Ala Tyr Asp Arg Phe Met Ala Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys Val Gln Leu Leu Ile Ala Tyr Ile Gly Gly Phe Leu Asn Thr Trp Ser Phe Thr Ile Cys Phe Tyr Ser Leu Val Phe Cys Gly Pro Asn Gly Val Asn His Phe Phe Cys Asp Phe Ala Pro Leu Ile Glu Leu Ser Cys Ser Asp Val Ser Val Pro Ala Thr Val Pro Ser Phe Thr Ala Gly Ser Ile Ile Val Val Thr Val Ile Val Ile Ala Ile Ser Tyr Ile Tyr Ile Leu Ile Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg Gln Lys Ala Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr Asp Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu

Lys Arg Gln Ile Gly Arg Lys Ile Phe Ser 310 <210> 1700 <211> 323 <212> PRT <213> Mus musculus <400> 1700 Met Ala Phe Leu Glu Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile Leu Val Gly Leu Thr Asp Asp Pro Val Leu Lys Val Ile Leu Phe Thr Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Val Asp Leu Gly Tyr Ser Ser Val 70 75 Thr Pro Asn Met Leu Ile Asn Phe Leu Ala Glu Asn Asn Thr Ile Ser Tyr Ile Gly Cys Ser Ile Gln Phe Gly Ser Ala Thr Phe Phe Gly Val 100 105 Leu Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala 125 115 120 Ile Cys Asn Pro Leu Leu Tyr Ser Ile Lys Met Ser Thr Gln Val Cys 135 140 Val Lys Leu Val Val Gly Ser Tyr Ile Gly Ser Ser Leu Asn Ala Ser 150 155 Phe Val Thr Val Ser Ile Phe Asn Leu Leu Phe Cys Gly Pro Asn Lys 170 Ile Asn His Phe Phe Cys Asp Phe Asp Pro Leu Ile Glu Leu Ser Cys 180 185 Ser Asp Val Ser Val Pro Val Ala Val Thr Ser Cys Ser Ala Gly Leu 195 200 Ile Thr Met Ile Thr Val Phe Val Ile Ala Val Ser Tyr Thr Tyr Ile 215 Leu Ile Thr Val Leu Lys Met Arq Ser Thr Glu Gly Arg His Lys Ala 230 Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly 250 Thr Val Thr Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Asp 270 Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu 280 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu 300 Lys Arg Gln Leu Gly Lys Lys Ile Phe Ser Gln Ser Asn Ile Leu Phe 310 Cys Lys Ser

295

300

<210> 1701

<211> 314

<212> PRT

<213> Mus musculus

```
<400> 1701
Met Ala Phe Leu Asp Asn Gly Asn His Thr Ala Val Thr Glu Phe Ile
Leu Leu Gly Leu Thr Asp Asp Pro Phe Leu Arg Ile Val Leu Phe Ser
                                25
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Phe Gly Asn Leu Ser Thr
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
Phe Leu Ser His Leu Ala Thr Val Asp Leu Gly Ile Ser Ser Val
Thr Pro Ser Met Leu Val Asn Phe Leu Ala Glu Arg Ser Thr Ile Ser
Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Leu Phe Gly Thr
            100
                                105
Leu Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Met Ala
        115
                            120
                                                125
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Leu Ser Thr Arg Phe Cys
                        135
                                            140
Ile Gln Leu Val Val Gly Ser Tyr Ile Gly Ala Phe Leu Asn Asp Ser
                    150
                                        155
Cys Tyr Ile Leu Ser Phe Ala Phe Phe Leu Phe Cys Gly Pro Asn Lys
                165
                                    170
Val Asp His Phe Phe Cys Asp Leu Ser Pro Met Met Glu Leu Ser Cys
            180
                                185
                                                    190
Ser Asp Ala Ser Val Ser Gly Val Val Ile Ser Phe Thr Ala Gly Ser
                            200
       195
Ile Thr Met Thr Thr Leu Ile Val Ile Val Ile Ser Tyr Phe Tyr Ile
                        215
                                            220
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly
                245
                                    250
Thr Ile Ile Phe Ile Tyr Val Met Pro Lys Ser Thr Tyr Ser Arg Asp
                                265
Gln Asn Lys Val Val Ser Leu Phe Tyr Met Val Val Ile Pro Met Leu
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu
                        295
Lys Lys Gln Phe Tyr Arg Lys Thr Leu Leu
<210> 1702
<211> 315
<212> PRT
<213> Mus musculus
<400> 1702
Met Gly Tyr Thr Asn Leu Ser Tyr Leu Asn Pro Gly Thr Val Ile Leu
                                    10
Ile Gly Ile Pro Gly Leu Glu His Val Gln Phe Trp Ile Gly Phe Pro
                                25
Phe Phe Val Val Cys Leu Val Ala Leu Leu Gly Asn Leu Phe Leu Leu
Ile Ile Ile Pro Thr Glu Arg Ser Leu His Gln Pro Met Tyr Ile Phe
Leu Ala Val Leu Ala Ala Thr Asp Leu Gly Leu Cys Leu Ala Ile Ala
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```
70
Pro Lys Met Leu Ala Ile Phe Trp Phe Gly Ser Cys Ser Met Ala Phe
                                    90
Asp Ala Cys Leu Thr Gln Leu Phe Phe Ile His Ala Leu Gln Gly Met
            100
                                105
Glu Ser Gly Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
        115
                            120
                                                125
Cys Asp Pro Leu Arg His Thr Ala Val Leu Thr Pro Leu Phe Leu Leu
                        135
                                            140
Arg Val Val Leu Val Val Ala Ile Arg Ala Thr Val Leu Val Gly Val
                    150
                                        155
Leu Pro Ile Leu Leu Lys Arg Leu Gln Trp Phe His Ser Val Val Ile
                165
                                    170
Val His Ser Tyr Cys Glu His Met Ala Val Val Lys Leu Ala Ala Glu
            180
                                185
                                                    190
Asp Val Arg Ile Asn Lys Ser Tyr Gly Leu Phe Val Ala Phe Ala Ile
       195
                            200
Leu Gly Phe Asp Met Ile Phe Val Phe Ile Ser Tyr Ile Leu Ile Phe
                        215
                                            220
Arg Ala Val Phe Arg Leu Pro Gln Lys Glu Ala Arg Ser Lys Ala Phe
                    230
                                        235
Asn Thr Cys Thr Ala His Ile Val Val Phe Leu Glu Phe Tyr Ile Leu
                245
                                    250
Ala Phe Phe Ser Phe Phe Ser His Arg Phe Gly His Val Ser Pro Tyr
            260
                                265
Val His Ile Leu Leu Ser Thr Ile Tyr Leu Leu Pro Pro Ala Leu
                            280
Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Glu Ile Arg Lys Trp Val
                        295
Val Gln Ile Phe Val Leu Lys Ser Asn Thr Gln
                    310
```

<210> 1703

<211> 308

<212> PRT

<213> Mus musculus

<400> 1703

Met Lys Asn Ile Thr Glu Ala Thr Phe Phe Val Leu Lys Gly Leu Thr Asp Asn Asn Glu Leu Gln Ile Ile Leu Phe Phe Leu Phe Leu Ala Ile Tyr Leu Phe Thr Leu Ile Gly Asn Val Gly Leu Ile Ile Leu Val Val Gly Asp Pro Gln Leu His Asn Pro Met Tyr Cys Phe Leu Ser Ala Leu Ser Phe Val Asp Ala Cys Tyr Ser Ser Asp Ile Thr Pro Asn Met Leu Val Gly Phe Met Ser Lys Ser Lys Ile Ile Ser Phe Tyr Gly Cys Ala Thr Gln Met Phe Leu Ala Val Thr Phe Gly Thr Thr Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile His Asp Pro Leu Leu Tyr Ala Val Ser Met Ser Pro Arg Val Tyr Leu Pro Leu Ile Ile Ala Ser Tyr Ala Gly Gly Ile Val His Ala Ile Ile His Thr Val Ala

```
Thr Phe Ser Leu Ser Phe Cys Gln Ser Asn Glu Val Lys His Ile Phe
Cys Asp Ile Pro Pro Leu Leu Ala Ile Ser Cys Ser Glu Thr Tyr Val
                                185
Asn Glu Leu Leu Phe Phe Phe Val Ser Phe Ile Glu Leu Val Thr
                            200
Ile Leu Ile Ile Leu Phe Ser Tyr Ala Phe Ile Leu Leu Ser Ile Leu
Lys Met Asn Ser Ala Glu Gly Arg Arg Lys Val Phe Ser Thr Cys Gly
                    230
                                        235
Ser His Leu Thr Ala Val Ser Ile Cys Tyr Gly Thr Ser Leu Phe Met
                245
                                    250
Tyr Val Arg Pro Ser Ser Asn Tyr Ser Leu Glu His Asp Met Ile Val
                                265
Ser Thr Phe Tyr Thr Ile Gly Ile Pro Met Leu Asn Pro Ile Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ile Lys Arg Val Leu Arg
                       295
Lys Asn Phe Ile
305
```

<210> 1704 <211> 319 <212> PRT

<213> Mus musculus

<400> 1704

Met Lys Asn Gln Ser Val Glu Ile Ile Phe Ile Leu Leu Gly Leu Thr 10 Asp Asp Pro Gln Leu Gln Ile Pro Ile Phe Leu Phe Leu Phe Phe Asn 25 Tyr Ile Leu Ser Leu Met Gly Asn Leu Val Ile Ile Leu Leu Thr Leu 40 Leu Asp Pro Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Ile Ala Phe Thr Thr Ala Cys Ile Pro Arg Phe Leu 75 Met Ser Ile Leu Thr Gly Asp Arg Thr Ile Ser Tyr Asn Ala Cys Ala 90 Ala Gln Leu Phe Phe Phe Leu Ser Leu Ile Thr Glu Phe Tyr Leu 100 105 110 Leu Ala Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Arg Pro Leu 120 125 His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Leu Leu Val Leu 135 140 Ser Ser Trp Val Thr Gly Phe Phe Val Ile Phe Pro Pro Leu Leu Leu 150 155 Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Thr Ile Asp His Phe Leu 165 170 Cys Asp Thr Ser Pro Val Leu Gln Leu Ser Cys Thr Asp Thr Arg Phe 180 185 190 Ile Glu Leu Met Ala Phe Ala Leu Ala Val Met Thr Leu Ile Ile Thr Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu 220 Lys Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His Met Val Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met

```
245
                                    250
Tyr Met Lys Thr Ser Ala Lys Glu Arg Val Ser Leu Asn Lys Gly Val
                                265
                                                    270
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Gln Gln Val Lys Asp Ala Phe Lys Gln Val Leu His
                        295
                                            300
Arg Met Cys Tyr Ser Gln Asn Ser Glu Leu Arg Phe Arg Pro Lys
                    310
<210> 1705
<211> 311
<212> PRT
<213> Mus musculus
<400> 1705
Met Arg Asn Arg Thr Val Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp
                 5
                                    10
Asp Ile Arg Leu Gln Ile Leu Leu Phe Ile Phe Leu Leu Ser Ser Tyr
           20
                                25
Met Leu Ser Leu Ser Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu Ile
                            40
                                                4.5
Asp Pro His Leu Lys Thr Pro Met Tyr Ile Phe Leu Lys Asn Phe Ser
                        55
Phe Leu Glu Ile Ser Leu Thr Thr Ala Cys Ile Pro Arg Phe Leu Tyr
                    70
                                        75
Ser Ile Ser Ser Gly Asp Lys Ser Ile Thr Tyr Ile Ala Cys Ala Ser
                85
                                    90
Gln Leu Leu Phe Ile Asp Leu Phe Ala Val Thr Glu Phe Phe Leu Leu
           100
                                105
                                                    110
Ala Ile Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
                                                125
Tyr Met Thr Ile Met Asn Ser Arg Val Cys Lys Asn Phe Ile Phe Ser
                        135
                                            140
Cys Trp Val Ala Ala Leu Ile Ile Ile Leu Pro Pro Ile Gly Leu Gly
145
                   150
                                        155
Leu Gly Leu Glu Phe Cys Asp Ser Asp Ile Ile Asp His Phe Cys Cys
                                    170
                                                        175
                165
Asp Ala Ala Pro Leu Leu Lys Ile Ser Cys Ser Asp Thr Trp Leu Ile
           180
                                185
                                                    190
Glu Gln Met Val Ile Ala Gly Ala Val Leu Thr Phe Ile Ile Thr Phe
                            200
                                                205
Val Cys Val Val Leu Ser Tyr Val Tyr Ile Ile Lys Thr Ile Leu Arg
                        215
                                            220
Phe Pro Ser Ala Lys Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                    230
                                        235
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
                245
                                    250
Val Lys Pro Ser Ser Lys Asp Asp Val Ala Ile Asn Lys Gly Ile Ser
                                265
Leu Leu Ile Ile Ser Ile Ser Pro Met Met Asn Pro Phe Ile Tyr Ala
                            280
Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Tyr Ser Ile Lys Lys
                        295
Ile Ala Phe Leu Ser Lys Met
```

```
<210> 1706
<211> 299
<212> PRT
<213> Mus musculus
<400> 1706
Met Lys Asn His Ser Val Ile Thr Glu Phe Leu Leu Gly Ile Ser
                                    10
Asp Thr Pro Glu Leu Gln Phe Val Ile Phe Ile Phe Leu Phe Ile Ala
                                25
Tyr Ile Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Ile Leu Thr Leu
                            40
Leu Asp Ser Gln Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
    50
                        55
Ser Phe Leu Glu Ile Ile Phe Thr Ser Val Ser Ile Pro Arg Phe Leu
                    70
                                        75
Glu Ser Ile Ile Thr Lys Val Lys Thr Ile Ser Tyr Asn Asn Cys Leu
                                    90
Ala Gln Leu Phe Phe Ile Ser Met Gly Val Ser Glu Phe Phe Leu
                                105
Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                125
His Tyr Thr Leu Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu
    130
                        135
                                             140
Thr Ser Trp Leu Gly Gly Phe Leu Thr Ile Phe Pro Leu Leu Met Leu
                    150
                                        155
Phe Leu Lys Leu Asp Phe Cys Ala Ser Asn Val Ile Asp His Phe Cys
                165
                                    170
                                                         175
Cys Asp Tyr Phe Pro Ile Leu Gln Leu Ser Cys Ser Asp Thr Trp Phe
                                185
Leu Glu Thr Ile Gly Phe Tyr Phe Ala Phe Ile Thr Leu Leu Phe Thr
                            200
                                                 205
Leu Ala Leu Val Ile Leu Ser Tyr Ile Cys Ile Ile Asn Thr Ile Leu
                        215
                                             220
Arg Phe Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                245
                                    250
Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr Lys Gly Val
                                265
                                                     270
Ala Leu Leu Asn Thr Ser Ile Ala Pro His Ala Glu Pro Phe Tyr Leu
                            280
His Leu Glu Lys Ser Thr Ser Lys Thr Ser Phe
    290
                        295
<210> 1707
<211> 323
<212> PRT
<213> Mus musculus
<400> 1707
Met Leu His Val Asn Ile Thr Asn Pro Ile Phe Ser Thr Phe Leu Val
1
                                    10
Thr Gly Ile Pro Gly Leu Glu Ala Val Tyr Ile Trp Ile Ala Ile Pro
            20
                                25
Phe Cys Ala Met Phe Leu Ile Thr Met Val Gly Asn Met Thr Ile Ile
                            40
Ile Val Ile Trp His Glu Gln Thr Leu His Val Pro Met Tyr Leu Phe
```

```
55
Leu Ala Met Leu Ala Ser Ser Asp Leu Gly Leu Ser Leu Phe Thr Phe
                    70
Pro Thr Leu Leu Arg Ile Phe Leu Leu Asn Asp Arg Glu Leu Thr Thr
Thr Ala Cys Phe Thr Gln Met Phe Phe Ile His Thr Phe Gln Leu Leu
            100
                                105
Glu Ser Ala Ile Ile Leu Ala Met Ala Phe Asp Trp Tyr Val Ala Ile
                            120
                                                 125
Ser His Pro Leu His Tyr His Ser Ile Leu Thr Asp Thr Val Ile Gly
                        135
                                            140
Lys Ile Gly Leu Thr Ile Val Gly Arg Thr Leu Thr Leu Gln Val Pro
                    150
                                        155
145
Ala Pro Ile Leu Leu Arg Arg Leu Tyr Phe Cys Ser Ser Asn Val Leu
                                    170
Ser His Ser Tyr Cys Leu His Pro Asp Ile Ile Lys Leu Ser Cys Ser
            180
                                185
                                                     190
Ser Thr Thr Val Asn Ser Ile Phe Gly Leu Phe Val Val Leu Ser Thr
        195
                            200
                                                 205
Leu Gly Leu Asp Phe Leu Leu Ile Leu Leu Ser Tyr Ala Leu Ile Leu
                        215
                                            220
Lys Thr Val Leu Asn Met Ala Ser His Ser Gly Arg Leu Lys Ala Leu
                    230
                                        235
Asn Thr Cys Ile Ser His Leu Cys Ala Val Val Leu Phe Phe Thr Pro
                245
                                    250
Met Ile Cys Leu Ser Met Leu His Arg Phe Gly Pro Arg Leu Pro Ser
            260
                                265
                                                     270
His Val Tyr Val Thr Leu Ala Asn Met His Phe Leu Ile Pro Pro Val
        275
                            280
Met Asn Pro Ile Val Tyr Val Val Lys Thr Lys Gln Ile Arg Asp Lys
                        295
                                            300
Ile Gln Lys Leu Phe Ile Arg Lys Ala Thr Lys Lys Ala Gln Ala Ala
                    310
                                         315
Ser Ile Thr
```

<210> 1708

<211> 310

<212> PRT

<213> Mus musculus

<400> 1708

 Met
 Gly
 Gln
 Asn
 Asp
 Ser
 Ser
 Val
 Val
 Glu
 Phe
 Ile
 Leu
 Gly
 Phe

 Ser
 His
 Phe
 Pro
 Glu
 Leu
 Gln
 Val
 His
 Met
 Phe
 Gly
 Ala
 Phe
 Leu
 Val
 Thr
 Leu
 Thr
 Gly
 Asn
 Ala
 Thr
 Ile
 Val
 Ile
 Val
 Ile
 Val
 Ile
 Pro
 Met
 Tyr
 Leu
 Phe
 Leu
 Glu
 Asn
 Ala
 Thr
 Ile
 Val
 Ile
 Ile

```
Leu Thr Tyr Pro Met Ile Met Ser Lys Arg Ile Phe Val Lys Leu Val
Val Cys Ser Trp Val Leu Gly Ile Met Thr Ala Thr Val Ser Val Thr
                    150
                                        155
Trp Val Phe Ser Phe Pro Phe Cys Gly Pro Ser Lys Ile Asn His Ile
                165
                                    170
Ser Cys Glu Val Pro Ala Val Leu Glu Leu Ala Cys Ala Asp Thr Phe
            180
                                185
                                                    190
Leu Phe Glu Val Tyr Ser Phe Thr Gly Thr Ile Leu Leu Val Leu Val
        195
                            200
Pro Phe Leu Leu Ile Leu Leu Ser Tyr Thr Gln Ile Leu Phe Thr Val
                        215
                                            220
Leu Arg Met Pro Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ala Ser His Leu Thr Ser Val Thr Leu Phe Tyr Ser Thr Ala Cys Met
                245
                                    250
Thr Tyr Leu Gln Pro Lys Ser Lys Tyr Ser Pro Asp Thr Lys Lys Leu
                                265
Met Ser Leu Ala Tyr Ser Leu Leu Thr Pro Leu Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Met Lys Arg Ala Val Val Lys Leu Cys
                        295
Gln Ile Lys Val Val Phe
```

<210> 1709

<211> 314 <212> PRT

<213> Mus musculus

<400> 1709

Met Arg Arg Gln Asn His Asn Ser Thr Val Glu Phe Ile Leu Leu Gly 1.0 Phe Ser Asn Tyr Pro Glu Leu Gln Gly Gln Met Phe Gly Ala Phe Leu 20 25 Val Ile Tyr Leu Val Thr Val Leu Gly Asn Ala Ile Ile Ile Thr Ile 40 Ile Phe Leu Asp Gln Ser Leu His Ile Pro Met Tyr Leu Phe Leu Gln 55 Asn Leu Ser Leu Val Asp Leu Cys Phe Ser Thr Val Ile Thr Pro Glu 70 75 Ile Leu Val Val Leu Thr Ser Glu Lys Ala Thr Ile Ser Phe Gly Gly 90 Cys Phe Val Gln Met Tyr Phe Ile Leu Leu Phe Gly Gly Thr Glu Cys 100 105 Phe Leu Leu Gly Ala Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys His 120 125 Pro Leu Ser Tyr Pro Val Ile Met Asn Lys Ser Val Phe Val Lys Leu 135 140 Val Met Phe Ser Trp Val Ser Gly Thr Met Met Thr Thr Leu Gln Thr 150 155 Thr Trp Val Phe Ser Phe Pro Tyr Cys Asp His Lys Glu Ile Asn His 170 165 Leu Phe Cys Glu Thr Pro Pro Val Leu Glu Leu Ala Cys Ala Asp Thr 185 Phe Leu Phe Glu Val Tyr Ala Phe Thr Gly Thr Ile Leu Ile Val Met 200 Val Pro Phe Leu Leu Ile Leu Leu Ser Tyr Thr Arg Ile Leu Phe Ser

```
220
    210
                        215
Ile Leu Arg Met Pro Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ala Ser His Leu Thr Ser Val Thr Leu Phe Tyr Gly Thr Ala Ser
                                     250
Ile Thr Tyr Leu Gln Pro Lys Ser Arg Tyr Ser Pro Asp Thr Lys Lys
                                 265
Leu Met Ser Leu Ala Tyr Thr Leu Leu Thr Pro Leu Leu Asn Pro Leu
                             280
Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Arg Ala Val Val Lys Leu
                        295
Trp Gln Arg Lys Val Thr Leu His Thr Gly
                    310
<210> 1710
<211> 326
<212> PRT
<213> Mus musculus
<400> 1710
Met Ser Leu Arg Gln Thr Gln Gly Ser Asn Ile Val Met Arg Arg Gln
Asn His Ser Ser Thr Val Glu Phe Ile Leu Leu Arg Phe Ser Asn Tyr
Pro Glu Leu Gln Asp Gln Met Phe Gly Thr Phe Leu Val Ile Tyr Leu
Val Thr Val Met Gly Asn Ala Ile Ile Ile Thr Ile Ile Phe Leu Asp
Gln Ser Leu His Ile Pro Met Tyr Leu Phe Leu Gln Asn Leu Ser Leu
Val Asp Leu Cys Phe Ser Thr Val Ile Thr Pro Lys Met Leu Val Val
                                     90
Leu Thr Ser Lys Lys Ala Thr Ile Ser Phe Gly Gly Cys Phe Ala Gln
            100
                                105
                                                     110
Met Tyr Phe Ile Leu Phe Phe Gly Val Thr Glu Cys Phe Leu Leu Gly
                            120
        115
                                                 125
Ala Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys His Pro Leu Ser Tyr
                        135
Pro Met Ile Met Asn Lys Arq Val Phe Met Lys Leu Val Met Phe Ser
                    150
                                         155
                                                             160
Trp Val Ser Gly Thr Met Met Ser Thr Leu Gln Thr Thr Trp Val Phe
                165
                                    170
                                                         175
Ser Phe Pro Tyr Cys Asp His Lys Glu Ile Asn His Leu Phe Cys Glu
            180
                                185
                                                     190
Thr Pro Pro Val Leu Glu Leu Ala Cys Ala Asp Thr Phe Leu Phe Glu
        195
                            200
Val Tyr Ala Phe Thr Gly Thr Ile Phe Ile Val Met Val Pro Phe Leu
                        215
                                             220
Leu Ile Leu Leu Ser Tyr Thr Arg Ile Leu Phe Thr Ile Leu Arg Met
                    230
Pro Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala Ser His
                245
                                    250
Leu Thr Ser Val Thr Leu Phe Tyr Gly Thr Ala Ser Ile Ile Tyr Leu
            260
                                265
                                                     270
Gln Pro Lys Ser Arg Tyr Ser Pro Asp Thr Lys Lys Leu Met Ser Leu
       275
                            280
                                                 285
Ala Tyr Ile Leu Leu Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu
    290
                        295
                                             300
```

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Val Ala Phe His Thr Ala
                325
<210> 1711
<211> 309
<212> PRT
<213> Mus musculus
<400> 1711
Met Gly Arg Gly Asn Arg Thr Thr Val Thr Glu Phe Val Leu Met Gly
                                    10
Phe Thr Asp Arg Pro Glu Leu Gln Leu Pro Leu Phe Val Val Phe Leu
                                25
Ile Leu Ile Thr Leu Val Gly Asn Leu Gly Met Ile Leu Leu Ile Lys
Ala Asp Ser Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Ser His Leu
Ala Phe Ile Asp Leu Cys Tyr Ser Ser Ser Ile Gly Pro Lys Met Leu
                                         75
Gln Asn Leu Leu Val Lys Lys Lys Thr Ile Ser Phe Ser Gly Cys Phe
                                    90
Ala Gln Leu Tyr Phe Ser Ser Ala Phe Val Thr Thr Glu Cys Phe Leu
                                105
Leu Ala Thr Met Ala Tyr Asp Arg Tyr Met Ala Ile Cys Asn Pro Leu
                            120
                                                 125
Thr Tyr Thr Ala Ile Met Thr Gln Arg Val Cys Lys Glu Leu Val Ile
    130
                        135
                                             140
Gly Val Tyr Thr Tyr Gly Phe Leu Asn Ser Val Ile Gln Thr Val Leu
                    150
                                         155
Thr Phe Gln Leu Ser Phe Cys Asn Ser Asn Val Ile His His Phe Tyr
                165
                                    170
Cys Ala Asp Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr His Asn
                                 185
Lys Glu Arg Gln Leu Leu Ile Phe Ser Ala Val Asn Leu Thr Gly Ser
        195
                            200
Leu Met Thr Val Leu Ile Ser Tyr Ile Cys Ile Leu Val Ser Ile Ile
                                             220
Lys Ile Glu Pro Ser Gln Gly Lys Cys Lys Ala Phe Ser Thr Cys Ala
                    230
                                         235
Ser His Leu Thr Val Val Thr Ile Phe Tyr Gly Thr Leu Phe Phe Met
                                    250
Tyr Met Arg Gln Pro Lys Thr Gly Ser Ser Trp Lys Tyr Ser Lys Val
                                 265
                                                     270
Ile Ser Val Phe Tyr Ser Leu Val Ile Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Thr Glu Val Lys Asp Thr Leu Lys Lys Met Leu
                        295
                                             300
Glu Gly Lys Thr Ser
305
<210> 1712
<211> 312
<212> PRT
<213> Mus musculus
```

Arg Asn Lys Glu Met Lys Arg Ala Val Leu Lys Leu Trp Gln Arg Lys

315

310

```
<400> 1712
Met Gly Thr Gly Asn Trp Ser Gln Val Ile Glu Phe Ile Ile Leu Gly
Phe Pro His Phe Gln Gly Val Gln Ile Tyr Leu Phe Phe Leu Leu Leu
Ser Ile Tyr Leu Thr Thr Ile Leu Gly Asn Leu Leu Ile Phe Leu Val
Val Tyr Leu Asp Ser Arg Leu His Thr Pro Met Tyr Arg Phe Val Ser
                        55
Ile Leu Ser Phe Leu Glu Leu Gly Tyr Thr Ala Ala Thr Ile Pro Lys
Met Leu Ala Asn Leu Leu Ser Glu Lys Lys Thr Ile Ser Phe Ser Gly
                                     90
Cys Leu Leu Gln Ile Tyr Phe Phe His Ser Leu Gly Ala Thr Glu Cys
                                105
Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg
                            120
Pro Leu His Tyr Pro Thr Leu Met Thr Gln Ser Leu Cys Ile Lys Ile
                        135
                                             140
Ala Ile Gly Cys Trp Leu Gly Gly Leu Ala Gly Pro Val Val Glu Ile
                    150
                                         155
Ser Leu Val Ser Arg Leu Pro Phe Cys Gly Pro Asn His Ile Gln His
                                    170
                165
Ile Phe Cys Asp Phe Pro Pro Val Leu Ser Leu Ala Cys Thr Asp Thr
            180
                                185
Ser Val Asn Val Leu Val Asp Phe Ile Ile Asn Ser Cys Lys Ile Leu
                            200
                                                 205
        195
Ala Thr Phe Leu Leu Ile Leu Ser Ser Tyr Leu Gln Ile Ile Arg Thr
                        215
Val Leu Lys Ile Pro Ser Ala Ala Gly Lys Lys Lys Ala Phe Ser Thr
                                         235
                    230
Cys Ala Ser His Leu Thr Val Val Leu Ile Phe Tyr Gly Ser Ile Leu
                245
Phe Met Tyr Val Arg Leu Lys Lys Ser Tyr Ser Leu Asp Tyr Asp Arg
                                265
                                                     270
Ala Leu Ala Val Val Tyr Ser Val Ile Thr Pro Phe Leu Asn Pro Phe
Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Glu Ala Leu Lys Arg Gln
                        295
Leu Met Arg Thr Gly Ile Leu Arg
305
                    310
<210> 1713
<211> 315
<212> PRT
<213> Mus musculus
<400> 1713
Met Arg Ile Asn Arg Ser Thr Ser Val Thr Glu Phe Leu Phe Ser Gly
1
Phe Pro Gln Phe Glu Asp Gly Ser Phe Leu Phe Phe Ile Pro Leu Phe
Phe Ile Tyr Ile Phe Ile Val Ile Gly Asn Leu Ile Val Phe Phe Ala
        35
                            40
Val Arg Met Asp Thr Arg Leu His Asn Pro Met Tyr Asn Phe Ile Ser
                        55
                                            60
Ile Phe Ser Phe Leu Glu Ile Trp Tyr Thr Thr Ala Thr Ile Pro Lys
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Met Leu Thr Asn Leu Ile Ser Lys Gln Arg Thr Ile Ser Leu Ile Gly
                                    90
Cys Leu Leu Gln Met Tyr Phe Phe His Ser Leu Gly Asn Ser Glu Gly
                                105
Ile Leu Leu Thr Thr Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Arg Tyr Pro Thr Ile Met Thr Pro Arg Leu Cys Ala Gln Leu
                        135
Ser Ala Gly Ser Cys Ile Phe Gly Phe Leu Val Leu Leu Pro Glu Ile
                    150
Ala Trp Ile Ser Thr Leu Pro Phe Cys Gly Pro Asn Gln Ile His Gln
                                    170
Ile Phe Cys Asp Phe Glu Pro Val Leu Arg Leu Ala Cys Thr Asp Thr
            180
                                185
Ser Met Ile Leu Val Glu Asp Val Val His Ala Val Ala Ile Ile Phe
        195
                            200
Ser Val Leu Val Ile Ala Ile Ser Tyr Met Arg Ile Ile Thr Val Ile
                        215
                                             220
Leu Arg Ile Pro Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ala Ala His Leu Gly Val Phe Leu Met Phe Tyr Gly Ser Val Ser Leu
                245
                                    250
Met Tyr Leu Arg Phe Ser Ala Thr Phe Pro Pro Ile Leu Asp Thr Ala
            260
                                265
                                                    270
Ile Ala Leu Met Phe Ala Val Leu Ala Pro Phe Phe Asn Pro Ile Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Met Lys Ile Ala Ile Lys Lys Leu Leu
                        295
Cys Ser Gln Lys Met Leu Pro Thr Ser Ala Ser
305
                    310
```

<210> 1714 <211> 315 <212> PRT

<213> Mus musculus

<400> 1714

Met Glu Asn Gly Asn Leu Ser Thr Val Thr Val Phe Val Phe Thr Gly Phe Pro Gln Leu Lys Asn Gly Gly Leu Leu Tyr Phe Phe Pro Leu Leu Phe Ile Tyr Ile Phe Ile Val Thr Gly Asn Leu Met Ile Phe Phe Ala 35 40 Val Arg Leu Asp Thr Arg Leu His Asn Pro Met Tyr Asn Phe Ile Ser 55 60 Ile Phe Ser Phe Leu Glu Met Trp Tyr Thr Thr Ala Thr Ile Pro Lys 70 Met Leu Ser Asn Leu Ile Ser Glu Gln Lys Thr Ile Ser Phe Ile Gly 85 90 Cys Leu Leu Gln Met Tyr Phe Phe His Ser Leu Gly Asn Thr Glu Gly 105 Thr Leu Leu Thr Val Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Arg Tyr Pro Asn Ile Met Thr Pro Arg Leu Cys Ala Gln Leu 135 140 Thr Ala Gly Ser Cys Val Phe Gly Phe Leu Ile Leu Leu Pro Glu Ile 150 155 Val Trp Ile Ser Thr Leu Pro Phe Cys Gly Pro Asn Gln Ile Thr Gln

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165
                                    170
Ile Phe Cys Asp Phe Thr Pro Leu Leu Lys Leu Ala Cys Thr Asp Ala
                                185
                                                     190
            180
Ser Val Ile Leu Val Gln Asp Val Ile His Ala Leu Ala Ile Leu Ile
                            200
                                                 205
        195
Thr Ser Leu Ile Ile Ser Leu Ser Tyr Ile Arg Ile Ile Val Val Ile
                        215
Leu Ser Ile Ser Ser Thr Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys
                    230
                                         235
Ala Ala His Ile Ala Val Phe Leu Leu Phe Phe Gly Ser Val Ala Leu
                                    250
Met Tyr Leu Arg Phe Ser Ala Thr Tyr Thr Pro Phe Trp Asp Asn Thr
            260
                                265
                                                     270
Ile Ala Leu Thr Phe Ser Val Phe Ala Pro Leu Phe Asn Pro Ile Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Met Lys Asp Ala Ile Asn Lys Leu Ile
                        295
Cys Ser Gln Lys Val Ser Asn Glu Ser Arg Arg
<210> 1715
<211> 318
<212> PRT
<213> Mus musculus
<400> 1715
Met Thr Gln Leu Val Ala Ser Gln Asn Gln Thr Met Val Ile Glu Phe
Leu Phe Ser Val Phe Pro Pro Leu Tyr Glu Gly Gly Leu Leu Phe Phe
Ile Leu Leu Ile Leu Val Tyr Ala Phe Ile Ile Ser Gly Asn Leu Val
Ile Phe Val Ala Val Gln Leu Asp Met Ala Leu His Thr Pro Met Tyr
                        55
Phe Phe Ile Ser Val Leu Ser Phe Leu Glu Ile Trp Tyr Thr Thr Thr
Thr Ile Pro Lys Met Leu Ser Ser Leu Val Ser Glu Lys Lys Thr Ile
Ser Leu Gly Gly Cys Leu Met Gln Met Tyr Phe Phe His Ser Leu Gly
            100
                                105
Ile Thr Glu Gly Cys Ile Leu Thr Ala Met Ser Ile Asp Arg Tyr Ile
        115
                            120
                                                 125
Ala Ile Cys Tyr Pro Leu Arg Tyr Pro Thr Ile Met Thr Ser Lys Leu
                        135
                                             140
Cys Ile Gln Leu Thr Ala Gly Ser Cys Phe Cys Gly Phe Leu Leu Val
                    150
                                        155
Leu Pro Glu Ile Ala Trp Ile Ala Thr Leu Pro Phe Cys Gly Ser Asn
                                    170
Lys Ile His Gln Ile Phe Cys Asp Phe Thr Pro Val Leu Ser Leu Ala
                                185
```

Cys Thr Asp Thr Ser Leu Val Val Ile Val Asp Ala Ile His Ala Val

Ile Met Val Ile Leu Gly Met Pro Ser Ala Glu Gly Arg His Lys Ala

Phe Ser Thr Cys Ala Ala His Leu Ala Val Phe Leu Leu Phe Phe Gly

220

235

250

200 Glu Ile Leu Ala Ser Phe Leu Val Ile Ala Leu Ser Tyr Ile Arg Ile

215

230

245

Ser Val Ala Val Met Tyr Leu Arg Phe Ser Ala Thr Tyr Ser Val Phe 260 265 Trp Asp Thr Val Ile Ala Val Thr Phe Val Ile Leu Ala Pro Phe Leu 280 Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Asp Ala Ile 295 Gly Arg Leu Phe His Gln Lys Arg Asp Val Arg Ala Gln Lys 310 <210> 1716 <211> 299 <212> PRT <213> Mus musculus <400> 1716 Met Trp Asn Thr Ser Glu Ala Ala Phe Leu Ser Cys Ser Cys Trp Tyr Thr Cys Ser Pro Leu Val Val Ile Cys Ser Ser Ser Leu Val Ile Arg Leu Asp Ala Ala Leu His Lys Pro Met Tyr His Phe Val Ser Val Leu Ser Phe Leu Glu Leu Trp Tyr Thr Ala Thr Thr Met Pro Lys Met Leu Ala Asn Leu Leu Ser Glu Lys Lys Thr Ile Ser Phe Ala Gly Cys Leu Leu Gln Thr Tyr Phe Phe His Ser Leu Gly Ala Ser Glu Cys Tyr Leu 90 Leu Thr Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu 105 100 His Tyr Pro Ser Ile Met Thr Thr Ala Leu Cys Val Lys Met Ala Ala 120 Gly Cys Trp Thr Cys Gly Phe Leu Cys Pro Ile Ser Glu Val Ile Leu 135 Val Ser Gln Leu Pro Phe Cys Asn Tyr Asn Glu Ile Pro His Ile Phe 150 155 Cys Asp Phe Pro Pro Leu Leu Ser Leu Ala Cys Lys Asp Thr Ser Thr

170 165 Asn Val Leu Val Asp Phe Ala Val Asn Ala Phe Ile Ile Leu Ile Thr 185 190 Phe Leu Phe Ile Met Ala Ser Tyr Gly Arg Ile Ile Gly Ala Val Leu 200 Lys Ile Lys Thr Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys Ala 215 Ser His Leu Ile Val Val Leu Ile Phe Phe Gly Ser Ile Ile Phe Met 230 235 Tyr Val Arg Leu Lys Lys Ser Tyr Ser Leu Thr Leu Asp Arg Thr Leu 250 Ala Val Val Tyr Ser Val Leu Thr Pro Leu Ala Asn Pro Ile Ile Tyr 265 Ser Leu Arg Asn Lys Glu Leu Ile Gln Ala Ile Lys Arg Thr Phe Phe 280 Lys Lys Val Glu Lys Ala Ser Pro Thr His His 290 295

<210> 1717

<211> 314

<212> PRT

```
<400> 1717
Met Asp His Val Asn Tyr Thr Trp Thr Arg Thr Phe Ile Leu Ala Gly
                                     10
Phe Thr Thr Ser Gly Ala Leu Arg Pro Leu Ala Phe Leu Gly Thr Leu
                                                     30
Cys Ile Tyr Leu Leu Thr Leu Ala Gly Asn Leu Phe Ile Ile Val Leu
Val Gln Ala Asp Ser Gly Leu Ser Thr Pro Met Tyr Phe Phe Ile Ser
                        55
                                             60
Val Leu Ser Phe Leu Glu Leu Trp Tyr Val Ser Thr Thr Val Pro Thr
                    70
                                         75
Leu Leu His Thr Leu Leu His Gly His Ser Pro Ile Pro Ser Ser Ala
                                     90
Cys Phe Val Gln Leu Tyr Val Phe His Ser Leu Gly Met Thr Glu Cys
                                 105
Tyr Leu Leu Gly Val Met Ala Leu Asp Arg Tyr Leu Ala Ile Cys Arg
                            120
Pro Leu His Tyr His Ala Leu Met Ser Lys Gln Val Gln Leu Trp Leu
Ala Gly Ala Thr Trp Val Ala Gly Phe Ser Ala Ala Leu Val Pro Ala
                    150
Cys Leu Thr Ala Ser Leu Pro Tyr Cys Leu Lys Glu Ile Ala His Tyr
                165
                                     170
Phe Cys Asp Leu Ala Pro Leu Met Arg Leu Ala Cys Val Ser Thr Arg
            180
                                 185
Trp His Ala Arg Val His Gly Ala Val Ile Gly Val Ala Thr Gly Cys
        195
                            200
Asn Phe Val Leu Ile Leu Gly Leu Tyr Gly Gly Ile Leu Thr Ala Val
                        215
Leu Lys Leu Pro Ser Ala Ala Ser Arg Ala Lys Ala Phe Ser Thr Cys
                    230
                                         235
Ser Ser His Met Thr Val Val Ala Leu Phe Tyr Ala Ser Ala Phe Thr
                245
                                     250
Val Tyr Val Gly Ser Pro Gln Ser Arg Pro Glu Gly Thr Asp Lys Arg
                                                     270
            260
                                 265
Ile Ala Leu Val Tyr Ala Leu Leu Thr Pro Phe Leu Asn Pro Ile Ile
Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Val Lys Arg Val Ser
                        295
Glu Lys Ile Arg Thr Leu Leu Arg Asp Thr
<210> 1718
<211> 312
<212> PRT
<213> Mus musculus
<400> 1718
Met Asp His Val Asn Tyr Thr Trp Thr Arg Thr Phe Ile Leu Ala Gly
Phe Thr Thr Ser Gly Thr Leu Gln His Leu Ala Val Phe Gly Thr Leu
Cys Ile Tyr Leu Leu Thr Leu Ala Gly Asn Leu Phe Ile Ile Val Leu
Val Gln Ala Asp Ser Gly Leu Ser Thr Pro Met Tyr Phe Phe Ile Ser
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Val Leu Ser Phe Leu Glu Leu Trp Tyr Val Ser Thr Thr Val Pro Thr
                    70
Leu Leu His Thr Leu Leu His Gly Pro Ser Pro Ile Pro Ser Ser Ala
                                    90
Cys Phe Val Gln Leu Tyr Val Phe His Ser Leu Gly Met Thr Glu Cys
                                105
Tyr Leu Leu Gly Val Met Ala Leu Asp Arg Tyr Leu Ala Ile Cys Arg
                            120
Pro Leu His Tyr His Ala Leu Met Ser Arg Gln Val Gln Lys Gln Leu
                        135
                                             140
Val Gly Val Thr Trp Leu Ala Gly Phe Ser Ala Ala Leu Val Pro Ala
                    150
                                        155
Gly Leu Thr Ala Ser Leu Pro Tyr Cys Leu Lys Glu Val Ala His Tyr
                165
                                    170
Phe Cys Asp Leu Ala Pro Val Met Gln Leu Ala Cys Val Asp Thr Ser
            180
                                185
                                                     190
Trp His Ala Arg Leu Tyr Ile Ala Val Ile Gly Met Ile Asn Thr Cys
        195
                            200
                                                 205
Asn Leu Thr Phe Ile Leu Gly Leu Tyr Gly Gly Ile Val Arg Ala Val
                        215
                                             220
Leu Lys Leu Pro Ser Ala Ala Ser Arg Ala Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Ile Thr Val Val Thr Leu Phe Phe Gly Ser Ala Phe Ile
                245
                                    250
Val Tyr Val Gly Pro Pro Glu Ile Arg Ala Glu Gly Arg Asp Lys Leu
            260
                                265
                                                     270
Ile Ala Leu Val Tyr Thr Leu Leu Thr Pro Phe Phe Asn Pro Ile Ile
                            280
Tyr Thr Leu Arg Asn Lys Glu Val Lys Glu Ala Phe Lys Arg Val Thr
                        295
Gln Arg Ile Asn Ala Val Leu Lys
                    310
```

<210> 1719

<211> 313

<212> PRT

<213> Mus musculus

<400> 1719

Met Val Glu Ser Asn Val Thr Cys Trp Gln Gly Phe Val Phe Leu Gly 10 Phe Ser Ser Phe Gly Glu Leu Gln Leu Leu Phe Val Leu Phe Leu 20 Ser Leu Tyr Leu Val Thr Ile Thr Ser Asn Val Phe Ile Ile Ile Val 35 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 Phe Leu Ser Phe Ser Glu Thr Cys Tyr Thr Leu Gly Ile Ile Pro Arg 70 Met Leu Ser Gly Leu Val Met Gly Gly Gln Ala Ile Ser Phe Met Gly 85 90 Cys Ala Thr Gln Met Phe Phe Ser Ala Ser Trp Ala Cys Thr Asn Cys 100 105 110 Phe Leu Leu Ser Val Met Gly Phe Asp Arg Tyr Val Ala Ile Cys Ala 120 125 Pro Leu His Tyr Ala Ser Arg Met Asn Pro Thr Val Cys Ala Gln Leu 135 140 Val Gly Thr Ser Phe Leu Ser Gly Tyr Leu Phe Gly Leu Gly Met Thr

```
150
                                        155
145
Leu Val Ile Phe Arg Leu Ser Phe Cys Ser Ser His Glu Ile Gln His
                165
                                    170
Phe Phe Cys Asp Thr Pro Pro Val Leu Ser Leu Thr Cys Gly Asp Thr
           180
                                185
                                                    190
Arg Leu Ser Glu Leu Gly Ile Leu Ile Leu Ser Leu Leu Val Leu Leu
       195
                            200
Val Ser Phe Phe Leu Ile Ser Val Ser Tyr Ala Tyr Ile Leu Val Ala
                        215
Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Val Val Ile His Tyr Gly Cys Ala Ser
                                    250
                245
Phe Met Tyr Leu Arg Pro Lys Ala Ser Tyr Ser Leu Glu Arg Asp Gln
                                265
            260
Leu Ile Ala Val Thr Tyr Thr Val Ala Thr Pro Leu Leu Asn Pro Ile
                            280
Val Tyr Ser Leu Arg Asn Arg Ala Val Gln Thr Ala Leu Arg Asn Ala
                        295
Phe Arg Gly Ser Leu Leu Gly Lys Arg
                    310
<210> 1720
<211> 309
<212> PRT
<213> Mus musculus
<400> 1720
Met Ile Asn Gln Thr Ile Leu Gln Glu Phe Ile Leu Ile Gly Phe Ser
                                    10
Ala Tyr Pro Leu Val Gln Thr Cys Leu Phe Val Val Phe Leu Cys Leu
            20
                                2.5
Tyr Met Val Thr Leu Ala Ser Asn Leu Thr Ile Met Gly Leu Thr Trp
                            40
                                                4.5
Ala Asp Arg Tyr Leu His Thr Pro Met Tyr Tyr Phe Leu Ser Ala Leu
                        5.5
Ser Phe Ser Glu Thr Cys Tyr Thr Leu Thr Ile Ile Pro Lys Met Leu
                    70
                                        75
Val Asp Leu Leu Asp Lys Asp Asn Arg Ile Ser Asp Ile Gly Cys Gly
                85
                                    90
Leu Gln Met Cys Phe Phe Leu Gly Leu Gly Gly Thr Asn Cys Ile Leu
            100
                                105
                                                   110
Leu Thr Val Met Gly Tyr Asp Arg Phe Leu Ala Ile Cys Asn Ala Leu
                            120
                                                125
Lys Tyr Pro Leu Leu Met Thr Asn Val Ala Cys Gly Gln His Val Ala
                        135
                                            140
Thr Ala Trp Val Gly Gly Phe Leu Ile Ser Leu Ile Glu Thr Thr Leu
                    150
                                        155
Ile Phe Arg Val Ser Phe Cys Ile Pro Asn Leu Ile Arg His Phe Phe
                                    170
                165
Cys His Met Arg Ala Val Leu Arg Leu Ser Cys Thr Asp Ser Asn Phe
            180
                                185
                                                    190
Thr Glu Phe Ile Val Thr Leu Met Ser Val Ser Gly Leu Leu Gly Thr
        195
                            200
```

Phe Leu Leu Ile Leu Leu Thr Tyr Val Phe Ile Leu Ser Ser Val Leu

Lys Ile Pro Ser Ala Glu Gly Lys Gln Lys Ala Phe Pro Pro Cys Ala

```
Ser His Leu Thr Val Ala Ile Ile His Phe Val Phe Ala Pro Val Val
                245
                                    250
Tyr Leu Lys Pro Glu Asn Ser Gly Gly Asp Asp Thr Leu Ile Ala Val
            260
                                265
                                                    270
Pro Tyr Thr Ile Ile Thr Pro Phe Leu Ser Pro Ile Ile Phe Thr Leu
                            280
                                                285
Arg Asn Lys Asp Ile Lys Asn Ala Phe Arg Glu Ile Met Arg Lys Thr
    290
                        295
                                            300
Val Val Leu Lys Lys
305
<210> 1721
<211> 315
<212> PRT
<213> Mus musculus
<400> 1721
Met Gln Thr Leu Arg Lys Asp Asn Cys Ser Ser Val Ser Glu Phe Leu
Leu Leu Gly Phe Ser Ser Glu Ser Gln Val Arg Val Ala Leu Phe Ile
                                25
Phe Phe Leu Leu Tyr Met Ile Thr Leu Leu Gly Asn Gly Leu Ile
Ile Thr Leu Ile Tyr Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ser Ile Leu Ser Leu Val Asp Met Ser Tyr Val Thr Thr
                    70
                                        75
Val Pro Gln Met Leu Val Asn Met Val Cys Pro Arg Arg Thr Ile Ser
                                    90
Trp Gly Ala Cys Val Ala Gln Met Phe Ile Phe Leu Leu Gly Ile
                                105
            100
Ala Glu Cys Val Leu Tyr Ala Ile Met Ala Tyr Asp Arg Tyr Val Ala
                            120
                                                125
Ile Cys Phe Pro Leu His Tyr Ser Val Leu Met Ser Arg Leu Val Cys
    130
                        135
                                            140
Ile Lys Met Val Thr Val Cys Trp Ser Ile Ser Ile Thr Gly Ala Leu
                    150
                                        155
Ile Tyr Thr Val Phe Thr Met Arg Leu Pro Tyr Cys Gly Pro Tyr Lys
                165
                                    170
Ile Asn His Phe Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys
            180
                                185
Ala Asp Thr Ser Phe Asn Asp Arg Leu Asp Phe Ile Leu Gly Phe Ile
        195
                            200
Phe Leu Leu Val Pro Leu Ser Leu Ile Leu Ala Ser Tyr Ala Cys Ile
                        215
Phe Ala Ser Ile Leu Arg Ile Arg Ser Ser Gln Gly Arg Leu Lys Ser
                    230
                                        235
Phe Ser Thr Cys Ala Ser His Ile Thr Val Val Thr Met Phe Tyr Gly
                245
                                    250
Pro Ala Met Ile Met Tyr Met Arg Pro Gly Ser Trp Tyr Asp Pro Glu
            260
                                265
                                                    270
Arg Asp Lys Lys Leu Ala Leu Phe Tyr Asn Val Val Ser Ala Phe Leu
        275
                            280
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Phe
                        295
                                            300
```

Leu Lys Val Leu Gly Asp Arg Gly Ala Ala Lys 310

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<213> Mus musculus
<400> 1722
Met Gln Glu Leu Ser Gln Ile Thr Val Thr Glu Phe Ile Leu Leu Gly
1
                                     10
Phe Thr Pro Asp Pro Arg Thr Asn Pro Leu Leu Phe Pro Phe Phe Leu
            20
                                 25
                                                     30
Val Phe Tyr Leu Leu Ile Leu Leu Ser Asn Ser His Leu Leu Ala Ile
        35
                             40
Ile His Gln Asp Ser Asp Leu His Thr Pro Pro Thr Tyr Phe Phe Ile
                        55
Gly Val Leu Ser Met Val Gly Val Cys Tyr Ala Thr Thr Thr Val Ser
65
                    70
                                         75
Gln Thr Leu Ala His Ile Leu Ser Arg Lys Arg Ala Ile Ser Phe Thr
                                     90
                85
Arg Cys Val Ala His Ile Tyr Ile Phe Leu Leu Phe Gly Val Thr Glu
            100
                                 105
                                                     110
Ser Trp Leu Leu Ser Ile Met Ser Val Asp Arg Tyr Ile Ala Ile Cys
                             120
His Pro Leu Arg Tyr Lys Val Ile Val Ser Gln Gly Met Cys Leu Leu
                        135
Met Val Gly Ile Cys Ala Thr Tyr Gly Val Val Gly Gly Leu Cys Cys
                    150
                                         155
                                                             160
Thr Phe Phe Ala Met Arg Leu Pro Tyr Cys Gly Pro Ser Glu Ile Asp
                                     170
His Tyr Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys Ala Asp
            180
                                 185
                                                     190
Thr Ser Leu Ser Asp Phe Val Asp Phe Ile Ile Gly Phe Asn Val Ile
        195
                            200
                                                 205
Val Val Pro Leu Ser Leu Ile Ala Ile Val Tyr Ala Asn Ile Phe Thr
    210
                        215
                                             220
Val Ile Met Lys Ile Arg Ser Thr Gln Arg Arg Thr Lys Asp Gln Gly
225
                    230
                                         235
                                                             240
Glu Asp Leu Arg Leu Pro His His Cys Gly His His Val Cys His Leu
                245
                                     250
Met Gln His His Ala His Glu Ser Cys Leu Trp Leu Leu Ile Lys Gln
            260
                                 265
                                                     270
Arg Gln Glu Asn Gly Leu Phe Tyr Asn Ile Ala Thr Ala Phe Leu Asn
                            280
                                                 285
Pro Val Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Arg Phe Leu
                        295
                                             300
<210> 1723
<211> 313
<212> PRT
<213> Mus musculus
<400> 1723
Met Arg Glu Glu Asn Glu Ser Ser Thr Ile Asp Phe Thr Leu Leu Gly
                 5
                                     10
Val Thr Arg Gln Arg Glu Gln Glu Tyr Phe Phe Ile Leu Phe Leu
                                25
                                                     30
Phe Ile Tyr Pro Ile Thr Val Phe Gly Asn Met Leu Ile Ile Leu Ala
```

<210> 1722 <211> 304 <212> PRT

```
Ile His Ser Asp Thr Arg Leu His Asn Pro Met Tyr Phe Phe Leu Ala
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
                    70
                                                             80
Met Leu Ala Asn His Leu Leu Gly Ser Lys Ala Ile Ser Phe Gly Gly
               85
                                    90
Cys Met Ala Gln Met Tyr Phe Met Ile Gly Leu Gly Asn Thr Asp Ser
                                105
Tyr Ile Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg
                            120
Pro Leu His Tyr Ala Thr Ile Met Ser Pro Gln Leu Cys Val Leu Leu
                        135
                                            140
Val Ala Gly Ser Trp Val Ile Ala Asn Ala Asn Ala Leu Pro His Thr
                    150
                                        155
Leu Leu Thr Ala Arg Leu Ser Phe Cys Gly Asn Lys Asp Val Ala Asn
                165
                                    170
Phe Tyr Cys Asp Ile Thr Pro Leu Leu Gln Leu Ser Cys Ser Asp Ile
            180
                                185
                                                    190
Arg Phe Asn Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Val
                            200
                                                205
Pro Leu Leu Cys Ile Ile Ile Ser Tyr Val Arg Val Phe Ser Thr Val
                        215
                                            220
Leu Arg Val Pro Ser Thr Lys Gly Phe Leu Lys Ala Leu Ser Thr Cys
                    230
                                        235
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly
                245
                                    250
Met Tyr Phe Arg Pro Leu Thr Ser Tyr Ser Leu Lys His Ala Leu Ile
                                265
                                                    270
Thr Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Lys Lys Leu Phe His
                        295
                                            300
Cys Pro Ser Ser Ser Ser Leu Met
                    310
```

<210> 1724

<211> 314

<212> PRT

<213> Mus musculus

<400> 1724

Met Ala Val Thr Asn Leu Thr Tyr Lys Pro Gln Phe Gln Leu Leu Gly 10 Leu Met Asp Gly Thr Asp Pro His Pro Leu Leu Phe Leu Leu Phe Leu 20 25 Ser Ile Tyr Leu Leu Asn Ala Leu Gly Asn Leu Ser Met Val Val Leu 35 Val Arg Ser Asp Gly Ala Leu Cys Ser Pro Met Tyr Tyr Phe Leu Gly 60 His Leu Ser Leu Val Asp Val Cys Phe Thr Thr Val Thr Val Pro Arg 70 75 Leu Leu Ala Thr Leu Leu His Pro Gly Gln Ala Ile Ser Phe Gln Ala 85 90 Cys Phe Ala Gln Met Tyr Phe Phe Val Ala Leu Gly Ile Thr Glu Ser 105 100 110 Tyr Leu Leu Ala Ala Met Ser Tyr Asp Arg Ala Val Ala Val Cys Arg 120 Pro Leu His Tyr Gly Ala Val Met Thr Pro Trp Arg Cys Phe Leu Leu

```
135
                                            140
Val Ala Ala Ser Trp Ala Val Ala His Leu His Ser Leu Leu His Thr
                    150
                                        155
Leu Leu Ile Ser Ala Leu Thr Tyr Pro Pro Ser Ala Pro Val Arg His
                                    170
                165
Phe Phe Cys Asp Met Thr Val Met Leu Ser Leu Ala Thr Ser Asp Thr
           180
                                185
                                                    190
Ser Ala Ala Glu Thr Ala Ile Phe Ser Glu Gly Leu Thr Val Val Leu
       195
                            200
Thr Pro Leu Leu Val Ser Leu Ser Tyr Ala Arg Ile Leu Val Ala
                        215
                                            220
Val Leu Gly Ile Arg Thr Thr Gly Gly Arg His Arg Val Phe Ser Thr
                    230
                                        235
Cys Gly Ala His Leu Val Val Val Ser Leu Phe Phe Gly Ser Val Leu
                245
                                    250
Ser Val Tyr Phe Arg Pro Ser Ser Ala Tyr Ser Ala Arg Tyr Asp Arg
                                265
                                                    270
Met Ala Ser Val Val Tyr Ala Val Val Thr Pro Thr Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Leu Lys Arg Gly
                        295
Phe Arg Trp Arg Ala Ala Pro Gln Asp Glu
<210> 1725
<211> 311
<212> PRT
<213> Mus musculus
<400> 1725
Met Glu Ser Lys Phe Glu Ser Asn Gly Thr Ala Val Thr Glu Phe Ile
                                    10
Leu Leu Gly Leu Val Glu Thr Ala Gly Leu Gln Pro Val Ile Phe Val
                                25
Val Phe Leu Phe Ala Tyr Leu Leu Thr Val Gly Gly Asn Leu Ser Ile
                            40
                                                45
Leu Ala Ala Val Phe Val Glu Pro Lys Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Gly Asn Leu Ser Met Leu Asp Val Gly Cys Ile Ser Val Thr
                    70
                                        75
Val Pro Ser Met Leu Gly Arg Leu Leu Ser His Lys Arg Thr Val Pro
                                    90
Tyr Gly Ala Cys Leu Thr Gln Leu Phe Phe Phe His Gln Leu Ala Gly
                                105
                                                    110
Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala
                            120
                                                125
Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Asn His Thr Val Gln
                        135
                                            140
```

Arg Ile Leu Val Ala Thr Ser Trp Ala Cys Ala Phe Ser Asn Ala Leu

Thr His Thr Val Ala Ile Ser Thr Leu Asn Phe Cys Gly Pro Asn Val

Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
180

Ser Ser Thr Gln Leu Asn Glu Leu Leu Leu Phe Gly Leu Gly Val Leu
195

Met Ala Gly Ala Pro Val Ile Leu Ile Val Thr Ser Tyr Ile His Val

155

220

170

150

```
Ala Ala Ala Val Leu Arg Ile Gln Ser Ser Glu Gly Arg Lys Lys Ala
                    230
                                        235
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Gly Ile Phe Tyr Gly
                245
                                    250
Thr Gly Val Phe Ser Tyr Met Arg Leu Gly Ser Val Glu Ala Ser Asp
                                265
Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Val Ile Ser Pro Met Leu
                            280
        275
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Gly Ala Leu
                        295
Arg Arg Val Leu Thr Gly Lys
                    310
<210> 1726
<211> 315
<212> PRT
<213> Mus musculus
<400> 1726
Met Gln Thr Lys Pro Arg Ile Asn Gly Thr Thr Ile Thr Glu Phe Ile
Leu Leu Gly Leu Val Glu Thr Pro Glu Leu Trp Pro Leu Val Phe Ile
                                25
Leu Phe Leu Leu Ala Tyr Met Thr Thr Val Gly Gly Asn Leu Ser Ile
Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Gly Asn Leu Ser Val Met Asp Val Gly Cys Ile Ser Val Thr
                    70
Ile Pro Ser Met Leu Val Arg Leu Leu Val Gln Lys His Thr Ile Pro
Tyr Gly Asp Cys Leu Thr Gln Leu Phe Phe Phe His Leu Leu Ala Gly
            100
                                105
Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala
                            120
Ile Cys Gln Pro Leu Thr Tyr Ser Thr Arg Met Asn Tyr Thr Ile Gln
                        135
Arg Ile Leu Val Ala Met Ser Trp Ala Cys Ala Phe Ser Asn Ala Leu
                    150
                                        155
Thr His Thr Val Ala Ile Ser Thr Leu His Phe Cys Gly Pro Asn Val
                165
                                    170
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
                                185
                                                     190
Ser Ser Thr Gln Leu Asn Glu Leu Leu Phe Gly Val Gly Phe Ile
                            200
Met Ala Gly Thr Pro Met Ala Leu Ile Phe Ile Ser Tyr Ile His Val
                        215
Ala Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala
                    230
                                        235
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ala Met Phe Tyr Gly
                245
                                    250
                                                         255
Thr Gly Met Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Phe Ser Asp
                                265
                                                     270
Lys Asp Lys Ala Ile Gly Ile Phe Asn Thr Val Ile Asn Pro Met Leu
```

280

Trp Arg Val Leu Thr Gly Arg Arg Pro Ala Ala

Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Ala Ala Leu

285

305 310 315

```
<210> 1727
<211> 315
<212> PRT
<213> Mus musculus
<400> 1727
Met Gln Pro Lys Pro Arg Ala Asn Gly Thr Thr Ile Thr Glu Phe Ile
                                     10
Leu Leu Gly Leu Val Glu Thr Pro Glu Leu Trp Pro Leu Val Phe Ile
            20
                                 25
Leu Phe Leu Leu Ala Tyr Met Thr Thr Val Gly Gly Asn Leu Ser Ile
                             40
Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Gly Asn Leu Ser Val Met Asp Val Gly Cys Ile Ser Val Thr
                    70
                                         75
Ile Pro Ser Met Leu Val Arg Leu Leu Val His Lys Arg Thr Ile Pro
                                     90
Tyr Gly Asp Cys Leu Thr Gln Leu Phe Phe Phe His Leu Leu Val Gly
            100
                                 105
Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala
                            120
        115
                                                 125
Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Asn His Thr Ile Gln
                        135
                                             140
Arg Ile Leu Val Ala Thr Ser Trp Ala Cys Ala Phe Ser Asn Ala Leu
                    150
                                         155
Thr His Thr Val Ala Ile Ser Thr Leu His Phe Cys Gly Pro Asn Val
                                     170
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
                                 185
Ser Ser Thr Gln Leu Asn Glu Leu Leu Leu Phe Gly Val Gly Phe Ile
                            200
Met Ala Gly Thr Pro Met Ala Leu Ile Phe Thr Ser Tyr Met His Val
                                             220
                        215
Ala Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala
                    230
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly
                                     250
Ala Gly Ile Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Leu Ser Asp
                                 265
                                                     270
Lys Asp Lys Ala Ile Gly Ile Phe Asn Thr Val Ile Asn Pro Met Leu
        275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Ala Ala Leu
                        295
Trp Arg Val Leu Thr Gly Arg Arg Pro Ala Ala
                    310
<210> 1728
<211> 315
<212> PRT
<213> Mus musculus
<400> 1728
Met Gln Pro Lys Pro Arg Ala Asn Gly Thr Thr Val Thr Glu Phe Ile
                 5
```

```
Leu Leu Gly Leu Val Glu Thr Pro Glu Leu Trp Pro Leu Val Phe Ile
Leu Phe Leu Leu Ala Tyr Met Thr Thr Val Gly Gly Asn Leu Ser Ile
Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr His Met Tyr Phe
Phe Leu Gly Asn Leu Ser Val Met Asp Val Gly Cys Ile Ser Val Thr
Ile Pro Ser Met Leu Gly Arg Leu Leu Ala His Arg Leu Thr Val Pro
Tyr Gly Ala Cys Leu Thr Gln Leu Phe Phe His Leu Leu Ala Gly
            100
                                105
Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala
Ile Cys Gln Pro Leu Thr Tyr Ser Thr Arg Met Asn His Ser Val Gln
                        135
                                            140
Arg Ile Leu Val Ala Ser Ser Trp Ala Cys Ser Phe Ser Asn Ala Leu
                    150
                                        155
Thr His Thr Val Ala Thr Ser Thr Leu Arg Phe Cys Gly Pro Asn Val
                                    170
Ile Asp Asn Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
                                185
Ser Ser Thr Gln Ile Asn Glu Leu Leu Leu Phe Ala Leu Ser Phe Ile
                            200
Met Ala Gly Thr Pro Met Ala Leu Ile Phe Thr Ser Tyr Ile Asn Val
                        215
Ala Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ala Met Phe Tyr Gly
                                    250
Thr Gly Met Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Leu Ser Asp
                                265
Lys Asp Lys Ala Ile Gly Ile Phe Asn Thr Val Ile Asn Pro Met Leu
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Ala Ala Leu
                        295
Trp Arg Val Leu Thr Gly Arg Arg Pro Ala Ala
                    310
```

```
<210> 1729
```

<400> 1729

 Met
 Glu
 Asn
 Cys
 Thr
 Lys
 Val
 Arg
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly
 Leu
 Thr

 Asp
 Asp
 Pro
 Gly
 Leu
 Gly
 Val
 Ser
 Leu
 Cys
 Ile
 Met
 Phe
 Thr
 Leu
 Ile
 30
 Ile
 Met
 Phe
 Thr
 Leu
 Ile
 30
 Ile
 Met
 Phe
 Thr
 Leu
 Ile
 30
 Ile
 Met
 Leu
 Phe
 Ile
 Met
 Leu
 Ile
 Met
 Leu
 Val
 Leu
 Leu
 Leu
 Val
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Ser
 Leu
 Ser
 He
 Leu
 Cys
 Asn
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Met
 Ile
 Leu
 Leu
 Leu
 Leu
 Ile
 Leu
 Leu
 Ile
 Leu
 Ile
 Leu

<211> 310

<212> PRT

<213> Mus musculus

```
100
                                105
Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Lys Pro Leu
                            120
                                                125
His Tyr Ser Thr Arg Met Thr Thr Ser Val Cys Ile Cys Leu Asn Ile
                        135
Val Ser Tyr Ile Cys Gly Phe Leu Asn Ala Ile Phe His Val Gly Asp
                    150
                                        155
Ile Phe Ser Leu Ser Phe Cys Lys Ser Asn Val Val His His Phe Phe
                165
                                    170
Cys Asp Val Pro Ala Val Leu Ala Leu Ser Cys Ser Asp Ile His Leu
            180
                                185
Ser Glu Val Ile Leu Val Phe Leu Ser Thr Phe Asn Val Phe Phe Ala
                            200
Leu Leu Ile Ile Ser Val Ser Tyr Leu Phe Ile Phe Ile Thr Val Leu
                        215
Lys Met Lys Ser Asp Gln Gly His Gln Lys Ala Leu Ser Thr Cys Ala
                    230
Ser His Leu Thr Val Val Ser Ile Phe Tyr Ser Thr Val Ile Phe Met
                                    250
Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Ala Asp Lys Val Ala
                                265
Ser Met Phe Tyr Thr Met Ile Ile Pro Thr Leu Asn Pro Leu Val Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Asn Asn Ala Phe Lys Lys Val Val Glu
                        295
                                             300
Arg Ala Lys Ile Phe Met
305
<210> 1730
<211> 308
<212> PRT
<213> Mus musculus
<400> 1730
Met Thr Ile Met Lys Asn Arg Thr Glu Val Thr Glu Phe Ile Leu Leu
Gly Leu Thr Asn Asp Pro Gly Met Gln Leu Pro Leu Phe Ile Thr Phe
Leu Leu Ile Tyr Thr Ile Thr Val Val Gly Asn Leu Gly Met Ile Leu
Leu Ile Val Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu
                        55
Gly Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Ala Val Thr Pro
                    70
                                        75
Thr Val Met Thr Glu Leu Leu Ile Gly Lys Lys Val Ile Ser Tyr Asn
                                    90
                85
                                                         95
Asp Cys Ala Ala Gln Met Phe Phe Phe Gly Ala Phe Ala Thr Val Glu
            100
                                105
Asn Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys
        115
                            120
                                                125
Lys Pro Leu His Tyr Ala Thr Ile Met Thr Lys Ser Val Tyr Thr Arg
                        135
                                            140
Ile Ile Thr Ala Ser Tyr Gly Ile Ser Phe Met Ser Ala Ser Ile His
                    150
                                        155
Ile Ala Asp Ile Phe Thr Leu Ser Phe Cys Lys Ser Asn Val Ile His
                                    170
                165
```

His Phe Phe Cys Asp Val Pro Ala Ile Met Ala Leu Thr Cys Phe Asp

185

190

```
Asn Gln Val Arg Glu Leu Val Leu Leu Tyr Ile Glu Ser Leu Asp Val
Phe Phe Ala Leu Ile Val Ile Cys Thr Ser Tyr Met Leu Ile Phe Val
                        215
Thr Ile Leu Lys Met His Ser Ala Ser Gly His His Lys Ala Ile Ser
                    230
Thr Cys Ala Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Val
                245
                                    250
Ile Phe Met Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Ile Asp
            260
                                265
Lys Val Thr Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro
                            280
Leu Val Tyr Ser Met Arg Asn Lys Glu Val Lys Asn Ala Phe Ile Lys
                        295
Leu Ile Leu His
305
```

<210> 1731 <211> 309 <212> PRT

<213> Mus musculus

<400> 1731 Met Thr Ile Met Lys Asn Arg Thr Glu Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asn Asp Pro Gly Leu Gln Leu Pro Leu Phe Ile Thr Phe 25 Leu Leu Ile Tyr Thr Ile Thr Val Val Gly Asn Leu Gly Met Ile Leu Leu Ile Val Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu 55 Gly Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Thr Ala Val Thr Pro Thr Val Met Asn Gly Leu Leu Ile Gly Asn Lys Val Ile Ser Tyr Asn Asp Cys Ala Ala Gln Met Phe Phe Phe Gly Ala Phe Ala Thr Val Glu 105 Asn Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys 120 Lys Pro Leu His Tyr Ala Thr Ile Met Thr Lys Ser Met Tyr Thr Trp 135 140 Leu Ile Thr Gly Ser Tyr Val Ile Ser Phe Thr Asn Ser Ser Ile His 150 155 Ile Ala Asp Ile Phe Thr Leu Ser Phe Cys Lys Ser Asn Val Ile His 165 170 His Phe Phe Cys Asp Val Pro Ala Ile Met Ala Leu Thr Cys Phe Asp 180 185 190 Asn Gln Val Arg Glu His Val Leu Leu Tyr Ile Glu Ser Leu Asn Val 200 Phe Phe Ala Leu Ile Val Ile Cys Thr Ser Tyr Met Leu Ile Phe Val 215 Thr Ile Leu Lys Met His Ser Ala Ser Gly His His Lys Ala Ile Ser 230 235 Thr Cys Ala Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Val 250 255 Ile Phe Met Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp 265

Lys Val Thr Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro

```
280
                                                285
Leu Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Ile Lys
                        295
                                            300
Leu Ile Leu His Tyr
305
<210> 1732
<211> 319
<212> PRT
<213> Mus musculus
<400> 1732
Met Thr Ser Met Glu Asn Ile Thr Glu Val Thr Glu Phe Ile Leu Leu
Gly Leu Thr Asp Asp Pro Asn Leu Gln Val Pro Leu Leu Leu Ile Phe
Leu Phe Ile Tyr Leu Val Thr Leu Ile Gly Asn Gly Gly Met Met Val
Ile Ile Phe Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser Asn Leu Ser Phe Val Asp Leu Gly Tyr Ser Ser Ala Val Ala Pro
Lys Met Val Ala Ala Leu Gln Ser Gly Asn Lys Val Ile Ser Tyr Asn
                                    90
Gly Cys Ala Ala Gln Phe Phe Phe Phe Val Gly Phe Ala Thr Val Glu
            100
                                105
Cys Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys
                            120
Arg Pro Leu His Tyr Thr Thr Thr Met Thr Thr Gly Val Cys Thr Ile
                        135
                                            140
Leu Thr Ile Gly Ser Tyr Thr Cys Gly Phe Leu Asn Ala Ser Ile His
                    150
                                        155
Ala Ala Asp Thr Phe Lys Leu Ser Phe Cys Gly Ser Asn Lys Ile Asn
                165
                                    170
His Phe Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ala Cys Ser Ser
            180
                                185
                                                    190
Thr His Ile Ser Lys Leu Val Val Phe Phe Val Val Gly Phe Asn Val
                            200
Phe Phe Thr Leu Leu Val Ile Ile Ile Ser Tyr Phe Phe Ile Tyr Ile
                        215
Ala Ile Gln Asn Met Lys Ser Ser Glu Gly Arg Lys Lys Ala Phe Ser
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Ala Val Ser Ile Phe Tyr Gly Thr Ile
                                    250
Ile Phe Met Tyr Leu Gln Pro Ser Ser Gly Gln Ser Met Asp Thr Asp
            260
                                265
Lys Ile Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Arg Glu Val Lys Ser Ala Leu Trp Lys
                        295
Ile Leu Asn Arg Phe Tyr Pro Ala Ser Phe Ser Val Ser Arg Lys
<210> 1733
<211> 314
<212> PRT
<213> Mus musculus
```

```
<400> 1733
Met Glu Asn Ser Thr Glu Val Thr Glu Phe Ile Leu Ala Gly Leu Thr
Asp Asp Pro Lys Leu Gln Ile Pro Leu Phe Ile Val Phe Leu Leu Ile
Tyr Leu Ser Thr Val Leu Gly Asn Leu Gly Met Val Gly Leu Ile Leu
Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser His Leu
Ser Leu Val Asp Phe Gly Tyr Ser Ser Ala Val Thr Pro Lys Val Met
Ser Gly Leu Leu Ser Ile Asp Lys Thr Ile Ser His Asn Thr Cys Gly
Thr Gln Phe Phe Phe Val Gly Phe Ile Thr Thr Glu Ser Phe Leu
                                105
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
                            120
His Tyr Thr Thr Thr Met Thr Thr Asn Thr Cys Ala Cys Leu Thr Ile
                        135
Gly Ser Tyr Val Cys Gly Phe Leu Asn Ser Ser Ile His Thr Gly Asn
                    150
Ile Phe Arg Leu Ser Phe Cys Lys Phe Asn Val Ile Asp His Phe Phe
                165
                                    170
Cys Asp Ala Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr Tyr Ile
            180
                                185
                                                    190
Ser Glu Thr Val Ile Phe Phe Val Val Gly Phe Asn Ala Leu Phe Ser
                            200
Ile Val Val Ile Thr Ile Ser Tyr Leu Leu Ile Phe Ile Thr Ile Leu
                        215
                                            220
Arg Met Arg Ser Ser Glu Gly Arg His Lys Ala Phe Ser Thr Cys Ala
                    230
                                        235
Ser His Leu Thr Ala Val Ser Ile Phe Tyr Gly Thr Val Ile Phe Met
                                    250
Tyr Leu Gln Pro Ser Ser Ser His Thr Met Gly Thr Asp Lys Met Ala
                                265
                                                    270
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Phe Lys Lys Ala Val Gly
                        295
Asn Ala Lys Ser Ala Leu Thr Phe Leu Phe
```

```
<210> 1734
<211> 307
<212> PRT
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<213> Mus musculus

Ser Leu Val Asp Phe Cys Tyr Ser Ser Thr Val Thr Pro Lys Val Ile

```
70
65
Ala Gly Phe Leu Thr Gly Asp Lys Ile Met Ser Tyr Asn Ala Cys Ala
                                    90
Ser Gln Met Phe Phe Phe Ala Asn Phe Gly Asp Val Glu Asn Tyr Leu
            100
                                105
Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Lys Pro Leu
                            120
                                                125
        115
His Tyr Ala Thr Thr Met Thr Thr His Met Cys Ala Ser Leu Val Ile
                        135
                                            140
Gly Cys Tyr Ile Cys Gly Phe Leu Ser Ala Ser Ile Tyr Thr Met Asp
                    150
                                        155
Ala Leu Ser Leu Ser Phe Cys Glu Ser Asn Val Ile His His Phe Phe
                                    170
                165
Cys Asp Val Leu Ala Val Met Ile Val Ser Cys Ser Asp Ser His Val
            180
                                185
                                                    190
Asn Glu Leu Ile Leu Ile Tyr Val Val Ser Phe Asn Met Phe Phe Ala
                            200
        195
Leu Ile Ile Ile Leu Ile Ser Tyr Met Phe Ile Phe Thr Asn Ile Leu
                        215
                                            220
Lys Ile His Ser Ser Ala Gly Tyr His Lys Ala Val Ser Thr Cys Ala
                    230
                                        235
Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe Met
                245
                                    250
Tyr Leu Gln Pro Ser Ser Ser His Thr Met Asp Thr Asp Lys Ile Ala
            260
                                265
                                                    270
Ser Val Phe Tyr Thr Met Val Ile Cys Met Leu Asn Pro Leu Val Tyr
                            280
Ser Leu Arg Ser Lys Asp Val Lys Ser Ala Phe Thr Lys Ile Val Leu
Arg Ser Lys
305
<210> 1735
<211> 314
<212> PRT
<213> Mus musculus
<400> 1735
Met Glu Asn Ser Thr Glu Val Thr Glu Phe Ile Leu Thr Gly Leu Thr
                                    10
Asp Asn Pro Glu Leu Gln Ile Pro Leu Phe Ile Val Phe Leu Leu Ile
            20
                                25
Tyr Leu Ser Thr Val Leu Gly Asn Leu Gly Met Val Gly Leu Ile Leu
                            40
                                                 45
Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser His Leu
                        55
Ser Leu Val Asp Phe Gly Tyr Ser Ser Ala Val Thr Pro Lys Val Met
                    70
                                        75
Pro Gly Leu Leu Ser Ile Asp Lys Thr Ile Thr His Asn Ala Cys Gly
                85
                                    90
Thr Gln Phe Phe Phe Val Ser Phe Ile Thr Thr Glu Ser Phe Leu
            100
                                105
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
```

115 120 125 Gln Tyr Thr Thr Thr Met Thr Thr Asn Thr Cys Ala Cys Leu Thr Ile

Gly Ser Tyr Val Cys Gly Val Leu Asn Ser Ser Ile His Thr Gly Asn

140

135

```
Ile Phe Arq Leu Ser Phe Cys Lys Phe Asn Val Ile Asp His Phe Phe
                165
                                    170
Cys Asp Ala Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr Ser Val
            180
                                185
Ser Glu Met Val Ile Leu Phe Val Val Gly Phe Asn Asp Ile Phe Ser
                            200
Ile Val Val Ile Pro Ile Ser Tyr Leu Phe Ile Phe Ile Thr Ile Leu
                        215
Arg Met Arg Ser Ser Glu Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala
                    230
Ser His Leu Thr Val Val Phe Ile Phe Tyr Gly Ser Gly Ile Phe Met
                245
                                    250
Tyr Leu Gln Pro Ser Ser Ser His Thr Met Gly Thr Asp Lys Met Ala
                                265
                                                     270
Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro Leu Val Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Lys Lys Ala Val Glu
                        295
                                            300
Lys Ala Lys Ile Ser Leu Ala Phe Thr Phe
                    310
```

<210> 1736 <211> 312 <212> PRT

<213> Mus musculus

<400> 1736 Met Glu Asn Arg Thr Glu Val Thr Glu Phe Ile Leu Leu Gly Val Thr 10 Asn Ala Pro Ala Leu Gln Thr Pro Leu Phe Ile Leu Phe Thr Leu Ile 20 25 Tyr Phe Ile Asn Met Thr Gly Asn Leu Gly Met Leu Val Leu Ile Leu Trp Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly Asn Leu 55 Ser Leu Val Asp Ile Phe Tyr Ser Ser Ala Val Thr Pro Thr Val Val 70 Ala Gly Leu Leu Val Gly Asn Gln Ala Ile Ser Tyr Asn Ala Cys Ala 90 Ala Gln Met Phe Leu Phe Val Val Phe Ala Thr Ala Glu Asn Phe Leu 100 105 Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu 120 125 His Tyr Thr Thr Thr Met Thr Pro Thr Thr Cys Ala Cys Leu Thr Met 130 135 140 Ala Cys Tyr Ala Gly Gly Phe Leu Asn Ser Ser Ile His Thr Gly Asp 150 155 Thr Phe Arg Leu Tyr Phe Cys Lys Ser Asn Val Val His His Phe Phe 165 170 Cys Asp Val Pro Ala Val Met Val Leu Ser Cys Ser Asp Arg His Ile 180 185 190 Ser Glu Met Val Leu Leu Tyr Gly Ala Ser Phe Val Ile Cys Ser Ala 200 205 Leu Leu Val Ile Leu Ile Ser Tyr Ile Phe Ile Phe Ile Thr Ile Phe 215 220 Lys Met Arg Ser Ala Ala Gly Tyr Gln Lys Ala Met Ser Thr Cys Val 230 235

Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Leu Ile Phe Met

```
245
                                    250
Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Thr Asp Lys Ile Val
                                265
                                                   270
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Val Val Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Lys Lys Val Val Glu
                        295
                                             300
Lys Ala Lys Tyr Thr Leu Gly Phe
<210> 1737
<211> 312
<212> PRT
<213> Mus musculus
<400> 1737
Met Glu Asn Arg Thr Glu Met Thr Gly Phe Ile Leu Leu Gly Leu Thr
                                    10
Asn Ala Pro Glu Leu Arg Ala Pro Leu Phe Ile Ile Ser Phe Ile
                                25
Tyr Phe Thr Asn Val Ile Gly Asn Leu Gly Met Ile Val Leu Ile Leu
Trp Asp Ser Arg Leu His Thr Pro Met Tyr Cys Phe Leu Ala Asn Leu
                        55
Ser Leu Val Asp Ile Phe Tyr Ser Ser Ala Val Ala Pro Thr Ile Leu
                    70
Ala Gly Leu Leu Val Gly Asn Ile Val Val Ser Tyr Asn Ala Cys Val
                                    90
Ala Gln Met Ile Ser Phe Ser Ala Phe Val Thr Thr Glu Asp Leu Leu
                                105
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
                            120
His Tyr Thr Thr Ile Met Thr Pro Thr Val Cys Ile Cys Leu Ile Met
                        135
Ala Cys Tyr Ala Gly Gly Phe Leu Asn Ser Ser Ile His Thr Gly Asp
                    150
Thr Phe Arg Leu Ser Phe Cys Gly Ser Asn Ala Val His His Phe Phe
                                    170
Cys Asp Val Pro Ala Val Met Thr Leu Ser Cys Ser Asp Arg His Val
            180
                                185
                                                    190
Ser Glu Ile Val Leu Ile Tyr Gly Ala Gly Phe Ile Ile Cys Ser Ala
                            200
Leu Leu Val Ile Leu Ile Ser Tyr Thr Phe Ile Phe Ile Thr Ile Phe
                        215
                                            220
Arg Met Arg Ser Ala Ala Gly Tyr Gln Lys Ala Met Ser Thr Cys Val
                    230
Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Val Ile Phe Met
                                    250
Tyr Leu Gln Pro Thr Ser Ser His Ser Met Asp Thr Asp Lys Thr Val
                                265
                                                    270
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Met Val Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Lys Lys Val Val Glu
                        295
                                            300
Lys Ala Lys Tyr Ser Leu Gly Phe
```

```
<210> 1738
<211> 315
<212> PRT
<213> Mus musculus
<400> 1738
Met Met Gln Asn Ile Ser Glu Leu Ser Glu Phe Ile Leu Val Gly Leu
Thr Asp Ala Pro Phe Leu Gln Thr Pro Leu Phe Ile Ile Phe Thr Leu
Ile Tyr Leu Thr Thr Leu Phe Gly Asn Leu Gly Met Ile Met Leu Ile
                            40
Leu Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn
Leu Ser Leu Val Asp Cys Val Tyr Ala Ser Ala Val Thr Pro Lys Val
                    70
                                        75
Met Glu Gly Phe Leu Thr Gly Asn Lys Ile Ile Ser Tyr Asn Ala Cys
Ala Ala Gln Met Phe Phe Val Ala Phe Ala Ile Thr Glu Asn Phe
                                105
Ile Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Lys Pro
                            120
Leu His Tyr Ser Thr Thr Met Thr Thr Thr Ile Cys Val Leu Leu Leu
                        135
                                            140
Val Gly Ser Tyr Leu Ser Gly Leu Leu His Ser Ser Ile His Val Ser
                    150
                                        155
Phe Thr Phe His Leu Ser Phe Cys Arg Ser Asn Val Val Asn His Phe
                165
                                    170
                                                         175
Phe Cys Asp Ile Pro Pro Leu Leu Ala Val Ser Cys Ser Ser Ile Arg
            180
                                185
Thr Asn Glu Ile Ile Leu Phe Met Leu Ala Gly Phe Asp Val Ala Phe
        195
Ser Leu Leu Val Ile Leu Thr Ser Tyr Leu Leu Ile Ser Val Ala Ile
                        215
                                            220
Val Arg Met Arg Ser Ala Glu Ser Arg Lys Lys Ala Ile Ser Thr Cys
                                        235
                    230
Ala Ser His Leu Thr Thr Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe
                                    250
Met Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp Lys Leu
                                265
                                                    270
Ala Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Lys Lys Val Ala
                        295
Gly Lys Ala Val Leu Ser Leu Gly Leu Ile Asn
305
                    310
<210> 1739
<211> 309
<212> PRT
<213> Mus musculus
<400> 1739
Met Ser Leu Met Glu Asn Asn Thr Asp Val Thr Gln Phe Leu Leu Leu
                                    10
Gly Leu Thr Asp Asp Pro Gly Leu Gln Phe Pro Leu Phe Ile Thr Phe
Leu Leu Ile Tyr Thr Ile Thr Leu Val Gly Asn Leu Gly Met Ile Leu
```

```
40
Leu Ile Val Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Gly Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Ala Val Thr Pro
Thr Val Met Thr Gly Leu Ile Gly Glu Lys Ile Ile Ser Tyr Asn Asp
               85
                                    90
Cys Ala Ala Gln Met Phe Phe Phe Val Ala Phe Ala Thr Val Glu Asn
                                105
           100
                                                    110
Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys
                            120
                                                125
Pro Leu His Tyr Ala Thr Thr Met Thr Ala Asn Val Cys Ile Cys Leu
                        135
                                            140
Cys Ile Gly Ser Tyr Thr Cys Gly Phe Leu Asn Ala Ser Ile His Ile
                    150
                                        155
Gly Asp Thr Phe Ser Leu Ser Phe Cys Arg Ser Asn Val Val His His
                                    170
                165
Phe Phe Cys Asp Ile Pro Ala Val Met Val Leu Ser Cys Ser Asp Arg
           180
                                185
                                                    190
His Val Ser Glu Leu Val Leu Val Tyr Val Val Ser Phe Asn Ile Phe
       195
                            200
                                                205
Phe Ala Leu Ser Val Ile Trp Ile Ser Tyr Ile Phe Ile Phe Ile Thr
                        215
                                            220
Ile Cys Lys Met His Ser Ser Ser Gly Tyr Arg Lys Ala Ile Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Ile Ala Val Ser Ile Phe Tyr Gly Thr Ile Ile
                                    250
                245
Phe Met Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Thr Asp Lys
           260
                                265
Ile Ala Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro Leu
                            280
                                                285
Val Tyr Ser Met Arg Asn Lys Glu Val Lys Ser Ala Phe Thr Lys Val
                        295
Leu Gln Val Ala Lys
305
```

<210> 1740 <211> 310

<212> PRT

<213> Mus musculus

<400> 1740

Met Thr Ser Leu Asn Asn Leu Thr Glu Val Thr His Phe Leu Leu Leu 1.0 Gly Leu Thr Asp Asp Pro Gly Leu Gln Leu Pro Leu Phe Ile Ile Phe 20 25 Leu Leu Ile Tyr Ile Ile Thr Leu Val Gly Asn Leu Gly Met Ile Leu 40 45 Leu Ile Leu Leu Asp Ser Arg Leu His Ile Pro Met Tyr Phe Phe Leu 55 Ala Asn Leu Ser Leu Val Asp Val Ile Tyr Ser Ser Ala Val Thr Pro 75 Lys Val Met Ala Gly Leu Ile Ile Gly Asp Asn Leu Ile Ser Tyr Asn 85 90 Glu Cys Ala Ala Gln Met Phe Phe Phe Ala Ala Phe Ala Thr Val Glu 105 Asn Tyr Leu Leu Thr Ser Met Ala Cys Asp Arg Tyr Ala Ala Val Cys

```
Lys Pro Leu Tyr Tyr Ala Thr Thr Met Thr Pro Ser Val Cys Met Cys
                        135
Phe Ile Met Gly Cys Tyr Ala Leu Gly Phe Leu Asn Ala Ser Val Tyr
                    150
                                        155
Leu Gly Asn Thr Phe Ser Leu Ser Phe Cys Lys Ser Asn Val Val His
                                    170
                165
His Phe Phe Cys Asp Met Pro Ala Ile Met Ala Leu Ser Cys Ser Asp
                                185
Arg His Val Asn Glu Leu Val Leu Ile Tyr Gln Ala Ser Phe Ile Ile
                            200
Phe Phe Ala Leu Ile Ile Ile Leu Ile Ser Tyr Ile Ile Ile Phe Ile
                        215
Thr Ile Leu Lys Met His Ser Glu Ala Gly Val Gln Lys Ala Leu Ser
                    230
                                        235
Thr Cys Ala Ser His Phe Thr Ala Val Phe Ile Phe Tyr Gly Thr Thr
                                    250
Ile Phe Met Tyr Leu Gln Pro Ser Ser Arg His Ala Met Asp Thr Asp
Lys Ile Val Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro
                            280
Leu Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Met Lys
                        295
Val Val Leu Lys Glu Lys
```

<210> 1741 <211> 307 <212> PRT

<213> Mus musculus

<400> 1741

Met Glu Asn Thr Thr Glu Val Thr Trp Phe Val Leu Leu Gly Leu Thr 10 Asn Asp Pro Gln Leu Gln Leu Pro Leu Phe Ile Thr Phe Leu Leu Ile 25 Tyr Ile Ile Thr Leu Val Gly Asn Leu Gly Ile Ile Leu Leu Ile Leu Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Ser Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Thr Ile Thr Pro Lys Val Met 70 75 Ala Gly Phe Leu Thr Gly Asp Arg Ile Ile Ser Tyr Asn Ala Cys Ala 90 Ser Gln Met Phe Phe Ala His Phe Ala Asp Val Glu Ser Tyr Leu 100 105 110 Leu Val Ser Met Ala Tyr Asp His Tyr Val Ala Val Cys Lys Pro Leu 120 125 His Tyr Ala Thr Thr Met Thr Thr His Leu Cys Val Phe Leu Val Ile 135 140 Gly Cys Tyr Ile Cys Gly Phe Leu Asn Ala Ser Ile Tyr Thr Val Asp 150 155 Val Phe Ser Leu Ser Phe Cys Glu Ser Asn Val Ile His His Phe Phe 170 Cys Asp Val Leu Ala Val Met Ile Ile Ser Arg Ser Asp Lys Tyr Ile 185 190 Asn Glu Leu Val Leu Ile Ser Val Ala Ser Phe Asn Ile Ile Phe Ser 200 Leu Ile Leu Ile Ser Tyr Met Phe Ile Phe Thr Asn Ile Leu

```
215
                                             220
Lys Ile Asn Ser Ser Glu Gly Tyr Arg Lys Ala Leu Ser Thr Cys Thr
                    230
                                         235
Ser His Phe Thr Ala Val Phe Ile Tyr Tyr Gly Thr Val Ile Phe Met
                                    250
Tyr Leu Gln Pro Thr Ser Ser His Ser Met Asp Thr Asp Lys Ile Val
                                265
                                                     270
Ser Val Phe Tyr Ser Ile Val Ile Pro Met Leu Asn Pro Leu Val Tyr
                            280
Ser Met Arg Asn Lys Glu Val Lys Asn Ala Phe Thr Lys Val Val Leu
                                             300
Arg Ser Arg
305
<210> 1742
<211> 307
<212> PRT
<213> Mus musculus
<400> 1742
Met Glu Asn Arg Thr Glu Val Arg Cys Phe Ile Leu Val Gly Leu Thr
                                    1.0
Asn Asp Pro Gly Leu Gln Leu Pro Leu Phe Ile Thr Phe Leu Leu Ile
                                25
Tyr Ile Ile Thr Leu Ile Gly Asn Leu Gly Leu Ile Leu Leu Ile Leu
Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly Asn Leu
                        55
Ser Leu Val Asp Phe Cys Tyr Ser Ser Thr Val Thr Pro Lys Val Ile
                    70
                                         75
Ala Gly Phe Leu Met Gly Asp Lys Ile Met Ser Tyr Asn Ala Cys Ala
                                    90
Ser Gln Met Phe Phe Phe Ala Asn Phe Ala Asp Val Glu Asn Tyr Leu
            100
                                105
                                                     110
Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Lys Pro Leu
                            120
                                                 125
His Tyr Ala Thr Thr Met Thr Thr His Met Cys Val Cys Leu Leu Ile
                        135
                                             140
Gly Cys Tyr Ile Cys Gly Phe Leu Asn Ala Ser Ile Tyr Thr Val Asp
                    150
                                         155
                                                             160
Ala Leu Ser Leu Ser Phe Cys Glu Ser Asn Val Val His His Phe Phe
                165
                                    170
                                                         175
Cys Asp Val Leu Ala Val Met Ile Ile Ser Cys Ser Asp Arg His Val
            180
                                185
                                                     190
Asn Glu Leu Ile Phe Val Tyr Val Ala Ser Phe Asn Ile Phe Phe Ala
        195
                            200
                                                 205
Leu Ile Leu Ile Ile Ile Ser Tyr Thr Phe Ile Phe Thr Asn Ile Leu
                        215
                                             220
Lys Leu Gln Ser Ala Ala Gly Tyr Arg Lys Ala Phe Phe Thr Cys Ala
                    230
                                        235
Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe Met
                                    250
Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Thr Asp Lys Ile Ala
                                265
                                                     270
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Phe Thr Lys Ile Ile Leu
                        295
                                             300
```

```
305
<210> 1743
<211> 308
<212> PRT
<213> Mus musculus
<400> 1743
Met Met Glu Asn Gln Thr Glu Val Thr Glu Phe Ile Leu Leu Gly Leu
Thr Asp Asp Pro Glu Leu Gln Ile Pro Leu Phe Ile Thr Phe Leu Ala
            20
Ile Tyr Thr Ile Thr Val Val Gly Asn Leu Gly Met Ile Leu Leu Ile
                            40
Leu Met Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn
Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Ala Val Thr Pro Lys Val
                    70
Met Ser Gly Phe Leu Ile Gly Asp Lys Val Ile Ser Tyr Asn Asp Cys
                                     90
Ala Ala Gln Met Phe Ile Phe Ala Ala Phe Ile Thr Val Glu Asn Tyr
Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro
                            120
Leu His Tyr Thr Thr Thr Met Thr Thr Ser Val Cys Thr Trp Leu Ile
                        135
                                             140
Ile Gly Ser Tyr Val Ile Gly Phe Met Asn Ala Ser Ile His Ile Gly
                    150
                                        155
Asp Thr Phe His Leu Tyr Phe Cys Glu Ser Asn Val Val His His Phe
                165
                                     170
Phe Cys Asp Ile Pro Ala Val Met Val Leu Ser Cys Ser Asp Arg Tyr
                                185
                                                     190
Ala Ser Glu Leu Val Leu Val Tyr Ile Val Ser Phe His Ile Phe Phe
                            200
Ala Phe Ile Val Ile Trp Ile Ser Tyr Val Phe Ile Phe Val Thr Ile
                        215
                                             220
Val Lys Met Gln Ser Ala Ala Gly His His Lys Ala Ile Ser Thr Cys
                    230
Ala Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Ser Ile Phe
                245
                                     250
Met Tyr Val Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp Lys Ile
                                265
Ala Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Leu Lys Lys Ile Ile
   290
                        295
Leu Gln Thr Thr
305
<210> 1744
<211> 314
<212> PRT
<213> Mus musculus
<400> 1744
```

Met Glu Asn Ile Ser Glu Val Thr Glu Phe Ile Leu Val Gly Ile Thr

Arg Ser Gly

```
25
Tyr Leu Ile Ala Leu Phe Gly Asn Leu Gly Met Ile Met Leu Ile Leu
Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu
Ser Leu Val Asp Cys Val Tyr Ala Ser Ala Val Thr Pro Lys Val Met
                                        75
Glu Gly Phe Leu Thr Gly Asn Lys Ile Ile Ser Tyr Asn Ala Cys Ala
                                     90
Ala Gln Met Phe Phe Phe Val Ala Phe Ile Ala Ile Glu Ser Leu Ile
            100
                                105
Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Asn Pro Leu
        115
                            120
                                                125
His Tyr Thr Thr Ile Met Thr Ser Thr Thr Cys Ile Leu Ile Val Thr
                        135
                                             140
Cys Cys Tyr Met Cys Gly Ile Leu Gln Ser Ser Ile His Val Ala Leu
                    150
                                        155
Ala Phe Cys Leu Ser Phe Cys Asn Ser Asn Val Ile Asn His Phe Phe
                165
                                    170
                                                         175
Cys Asp Ile Pro Pro Leu Leu Asp Ile Ser Cys Ser Asp Thr Tyr Thr
                                185
                                                     190
Asn Glu Ile Thr Val Leu Ile Leu Gly Thr Cys Asp Gly Ile Leu Thr
        195
                            200
                                                205
Leu Leu Val Ile Leu Asn Thr Tyr Leu Leu Ile Phe Ile Ala Ile Leu
                        215
                                            220
Arg Met Arg Ser Val Glu Ala Gln Arg Lys Ala Phe Ser Thr Cys Ala
                    230
                                         235
Ser His Leu Ile Thr Val Ser Ile Phe Phe Gly Ser Thr Leu Phe Met
                245
                                    250
Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asn Thr Asp Lys Ile Ala
                                265
                                                     270
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Val Val Tyr
                            280
                                                285
Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Lys Lys Val Val Gly
                        295
Lys Leu Met Thr Ser Leu Gln Leu Val Asn
<210> 1745
<211> 307
<212> PRT
<213> Mus musculus
<400> 1745
Met Glu Asn Arg Thr Glu Val Thr Trp Phe Ile Leu Val Gly Leu Thr
                                    10
Asn Asp Ser Gln Leu Gln Leu Pro Leu Phe Ile Thr Phe Leu Leu Ile
Tyr Thr Val Thr Phe Val Gly Asn Leu Gly Leu Ile Leu Leu Ile Leu
Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Ser Asn Leu
Ser Leu Val Asp Phe Cys Tyr Ser Ser Thr Ile Thr Pro Lys Val Ile
                    70
```

Ala Gly Ile Leu Thr Gly Asp Lys Ile Met Ser Tyr Asn Ala Cys Ala

90

Asp Ala Pro Glu Leu Gln Ile Pro Leu Phe Ile Ile Phe Thr Leu Ile

```
Ser Gln Met Phe Phe Phe Ala Asn Phe Ala Asn Val Glu Asn Tyr Leu
Leu Val Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
                            120
His Tyr Ala Thr Thr Met Thr Lys Arg Val Cys Ala Ser Leu Val Ile
Gly Cys Tyr Ile Cys Gly Leu Leu Asn Ala Ser Ile Tyr Thr Met Asp
                   150
Ala Leu Ser Leu Ser Phe Cys Glu Ser Asn Val Val His His Phe Phe
                                    170
Cys Asp Val Leu Ala Ile Met Thr Thr Ser Cys Ser Asp Arg His Val
           180
                                185
Asn Glu Leu Ile Leu Val Tyr Leu Ala Ser Phe Asn Val Phe Phe Ala
       195
                            200
Leu Ile Leu Ile Ser Tyr Met Phe Ile Phe Thr Asn Ile Leu
                        215
                                            220
Lys Met His Ser Ala Ser Gly Tyr Cys Lys Ala Ile Ser Thr Cys Ala
                    230
Ser His Leu Thr Ala Val Phe Ile Phe Tyr Gly Thr Ile Ile Phe Met
                245
                                    250
Tyr Leu Gln Pro Ser Ser His His Ser Met Asp Thr Asp Lys Ile Ala
           260
                                265
                                                    270
Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro Leu Val Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Phe Thr Lys Ile Val Leu
Arg Ser Gly
305
```

<210> 1746 <211> 312 <212> PRT

<213> Mus musculus

<400> 1746

Met Ile Ala Arg Gly Asn Ser Thr Glu Ile Thr Gln Phe Ile Leu Leu Gly Phe Thr Asp Leu Pro Ile Ile Ile Leu Leu Phe Val Thr Phe 20 25 Leu Leu Ile Tyr Ile Thr Thr Leu Thr Trp Asn Leu Ser Leu Ile Val 40 Leu Ile Arg Met Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu 55 Cys Asn Leu Ser Ile Ile Asp Leu Cys Tyr Val Thr Ser Thr Val Pro 70 75 Lys Met Leu Ser Asn Phe Phe Gln Glu Arg Gln Thr Asn Ser Phe Val 90 Gly Cys Ile Val Gln Asn Phe Ile Phe Ser Thr Met Gly Leu Ser Glu 100 105 Ser Cys Leu Met Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys 120 Asn Pro Leu Leu Tyr Ala Ser Ile Met Ser Pro Thr Leu Cys Val Leu 135 140 Met Val Leu Ala Ser Tyr Leu Ser Gly Leu Thr Ala Ser Leu Leu Gln 150 155 Leu Phe Ala Leu Leu Arg Leu His Phe Cys Gly Thr Asn Val Ile Lys 170 His Phe Phe Cys Asp Met Pro Gln Leu Leu Val Leu Ser Cys Thr Asp

```
180
                                185
Thr Phe Phe Val Gln Val Leu Thr Ala Ile Leu Thr Met Ile Phe Gly
                            200
Phe Val Asn Met Leu Val Ile Met Ile Ser Tyr Val Tyr Ile Val Leu
                        215
Ser Ile Leu Lys Ile Thr Ser Ala Lys Gly Arg Ser Lys Ala Phe Asn
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Thr Ser Ser
                                    250
Ile Phe Val Tyr Leu Ser Ser Ser Ser Gly Gly Ser Ser Ser Phe Asp
                                265
Arg Phe Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Lys Asn Arq Glu Ile Lys Asp Ala Met Lys Arq
                        295
Leu Gln Lys Lys Thr Ile Cys Asn
<210> 1747
<211> 315
<212> PRT
<213> Mus musculus
<400> 1747
Met Glu Ala Met Ile Lys Gly Lys Asn Ile Thr Glu Ile Thr Glu Phe
Ile Leu Leu Gly Phe Ser Asp Phe Pro Gln Ile Thr Ala Leu Leu Phe
                                25
Val Ile Phe Leu Thr Leu Tyr Ile Thr Ala Leu Thr Trp Asn Leu Ser
                            40
                                                45
Leu Val Val Leu Ile Arg Met Asp Ser Tyr Leu His Thr Pro Met Tyr
                        55
Phe Phe Leu Ser Asn Leu Ser Phe Ile Asp Ile Cys Tyr Ile Ser Ser
                    70
                                        75
Thr Val Pro Lys Met Leu Phe Asn Phe Phe Gln Lys Arg Gln Thr Ile
                                    90
Ser Phe Val Gly Cys Ile Val Gln Tyr Phe Met Phe Ser Thr Met Gly
            100
                                105
Leu Ser Glu Ser Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala
                            120
                                                125
Ala Ile Cys Asn Pro Leu Leu Tyr Ser Ser Val Met Ser Pro Thr Leu
                        135
                                            140
Cys Ala Arg Met Val Met Gly Ser Tyr Thr Ala Gly Phe Ile Gly Ser
                    150
                                        155
Val Ser Gln Val Phe Ala Met Leu Gln Leu His Phe Cys Gly Pro Asn
                165
                                    170
                                                        175
Val Ile Arg His Phe Phe Cys Asp Ile Pro Gln Leu Leu Asn Leu Ser
            180
                                185
                                                    190
Cys Thr Asp Thr Phe Phe Ala His Val Glu Leu Leu Ile Leu Thr Met
        195
                            200
Leu Phe Cys Ile Ser Asn Ala Leu Val Ile Ile Ile Ser Tyr Gly Tyr
                        215
Ile Val Leu Ser Ile Leu Lys Ile Thr Ser Ala Lys Gly Arg Ser Lys
Ala Phe Asn Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr
Thr Ser Thr Ala Phe Val Tyr Phe Ser Ser Ser Gly Gly Ser Ser
```

265

Ser Phe Asp Arg Phe Val Ser Val Phe Tyr Thr Val Leu Ile Pro Met 275 280 Leu Asn Pro Leu Val Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala 295 Gly Lys Arg Leu Gln Lys Lys Leu Gly Cys Cys 310 <210> 1748 <211> 312 <212> PRT <213> Mus musculus <400> 1748 Met Ile Gly Glu Arg Asn Ile Thr Lys Ile Thr Gln Phe Ile Leu Leu 10 Gly Phe Ser Asp Phe Pro Arg Ile Thr Val Pro Leu Phe Val Met Phe 20 25 Leu Met Ile Tyr Thr Leu Ala Val Thr Trp Asn Phe Ser Leu Ile Ala 40 Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser Asn Leu Ser Ile Ile Asp Ile Cys Tyr Ile Thr Ser Thr Ala Pro 70 Lys Met Leu Ser Asn Phe Phe Gln Glu Lys Gln Thr Ile Ser Phe Val 90 Gly Cys Ile Val Gln Tyr Phe Ile Leu Ser Thr Met Gly Leu Thr Glu 100 105 Ser Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys 120 Asn Pro Leu Leu Tyr Ser Ser Val Met Ser Pro Thr Leu Cys Ala Gln 135 140 Met Val Met Gly Ser Tyr Thr Ala Gly Leu Thr Gly Ser Val Ser Gln 150 155 Ile Cys Ala Leu Leu Gln Leu Tyr Phe Cys Gly Pro Asn Val Ile Arg 170 His Phe Phe Cys Asp Ile Ser Gln Leu Leu Asn Leu Ser Cys Ser Asp 180 185 190 Ala Phe Phe Val Gln Val Leu Leu Ala Ile Leu Thr Met Cys Phe Gly 200 Ile Ala Asn Ala Leu Ala Thr Met Leu Ser Tyr Gly Phe Ile Val Leu 215 220 Ser Ile Leu Lys Ile Thr Ser Ala Lys Gly Arg Ser Lys Ala Phe Asn 230 235 Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Ser Thr Ala 245 250 Ile Phe Val Tyr Leu Arg Ser Ser Ser Gly Gly Ser Ser Ser Phe Asp 260 265 270 Arg Phe Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro 275 280 285 Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Met Lys Arg 295 300 Leu Gln Lys Lys Ile Cys Ser 310 <210> 1749

<211> 312

<212> PRT

```
<400> 1749
Met Ile Gly Gly Arg Asn Ile Thr Lys Ile Thr Gln Phe Ile Leu Leu
                                    10
Gly Phe Ser Asp Phe Pro Gln Ile Thr Ala Leu Leu Phe Val Met Phe
            20
                                25
Leu Thr Leu Tyr Ile Thr Ala Leu Thr Trp Asn Leu Ser Leu Val Val
Leu Ile Arq Met Asp Ser Tyr Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ile Ser Ser Thr Val Pro
                    70
Lys Met Leu Ser Asn Leu Phe Gln Glu Lys Gln Thr Ile Ser Phe Val
                                    90
Gly Cys Ile Val Gln Tyr Phe Ile Phe Ser Thr Met Gly Leu Ser Glu
                                105
                                                     110
Ser Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
                            120
Asn Pro Leu Leu Tyr Ser Ser Val Met Ser Pro Thr Leu Cys Ala Arg
                        135
Met Val Met Gly Ser Tyr Thr Ala Gly Leu Val Ser Ser Leu Ser Gln
                    150
Ile Cys Val Leu Leu Gln Leu His Phe Cys Gly Pro Asn Val Ile Arg
                                    170
His Phe Phe Cys Asp Met Pro Gln Leu Leu Asn Leu Ser Ser Asn Asp
            180
                                185
                                                     190
Thr Phe Phe Ala His Val Leu Leu Val Ile Leu Thr Met Phe Phe Gly
                            200
Leu Ile Asn Ala Leu Ala Ile Met Val Ser Tyr Gly Tyr Ile Ala Ser
                                             220
Ser Ile Met Lys Ile Thr Ser Val Asn Gly Arg Ser Lys Ala Phe Asn
                                         235
                    230
Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Ser Ser Gly
Ile Phe Val Tyr Leu Ser Ser Ser Gly Gly Ser Ser Ser Phe Asp
            260
                                                     270
Arg Phe Ala Ser Val Phe Tyr Ser Val Val Ile Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Met Asn Arg
                        295
                                             300
Leu Gln Lys Lys Val Ile Cys Ser
305
                    310
<210> 1750
<211> 315
<212> PRT
<213> Mus musculus
<400> 1750
Met Pro Gly Gly Arg Asn Ser Thr Val Ile Thr Lys Phe Ile Leu Val
                                    10
                                                         15
Gly Phe Ser Asp Phe Pro Lys Leu Lys Leu Val Leu Phe Val Ile Phe
            20
                                2.5
Leu Gly Ser Tyr Leu Ser Thr Val Val Trp Asn Leu Gly Leu Ile Ile
                            40
                                                 4.5
Leu Ile Arg Ile Asp Pro Tyr Leu His Thr Pro Met Tyr Phe Phe Leu
```

```
Ser Asn Leu Ser Phe Leu Asp Phe Cys Tyr Ile Ser Ser Thr Thr Pro
Lys Met Leu Ser Gly Phe Phe Gln Lys Ser Lys Ser Ile Ser Phe Val
Gly Cys Thr Met Gln Tyr Phe Ile Phe Ser Ser Leu Gly Leu Ser Glu
Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
Asn Pro Leu Leu Tyr Thr Ala Ile Met Ser Pro Ser Leu Cys Val His
Met Val Val Gly Ala Tyr Ser Thr Gly Leu Leu Gly Ser Leu Ile Gln
                    150
                                        155
Leu Cys Ala Ile Leu Gln Leu His Phe Cys Gly Pro Asn Ile Ile Asn
                                    170
His Phe Phe Cys Asp Leu Pro Gln Leu Leu Val Leu Ser Cys Ser Glu
            180
                                185
                                                    190
Thr Phe Pro Leu Gln Val Leu Lys Phe Val Ile Ala Val Ile Phe Gly
                            200
Val Ala Ser Val Ile Val Ile Leu Ile Ser Tyr Gly Tyr Ile Ile Gly
                        215
                                            220
Thr Ile Leu Asn Ile Ser Ser Val Glu Gly Arg Ser Lys Ala Phe Asn
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Ala Val Thr Leu Phe Phe Gly Ser Gly
                                    250
Leu Phe Val Tyr Met Arg Pro Ser Ser Asn Ser Ser Gln Gly Tyr Asp
                                265
Lys Met Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Leu Gln Arg
                        295
Cys Lys Asn Lys Cys Phe Ser Gln Cys His Cys
                    310
```

<210> 1751 <211> 318

<212> PRT

<213> Mus musculus

<400> 1751

Met Ala Val Gly Arg Asn Ile Ser Val Val Thr Asn Phe Ile Leu Leu Gly Phe Leu Glu Arg Pro Gln Leu Gln Ile Val Leu Phe Val Leu Phe Leu Gly Ile Tyr Leu Val Thr Leu Ala Gly Asn Leu Gly Leu Ile Val Leu Ile Arg Met Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Val Asp Val Ser Tyr Thr Ser Ser Ile Ala Pro 70 Lys Met Leu Cys Asp Phe Phe Arg Glu Gln Lys Ser Ile Thr Phe Ile 85 90 Gly Cys Ala Ile Gln Leu Phe Phe Phe Val Gly Met Gly Gly Thr Glu 100 105 110 Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser 120 125 Asn Pro Leu Leu Tyr Pro Ser Leu Met Ser Pro Thr Ile Cys Val Gly Met Ala Ile Thr Val Tyr Thr Gly Gly Phe Leu Thr Gly Leu Ile Gln

```
150
                                      155
Thr Ser Ser Ile Phe Arg Leu His Phe Cys Gly Pro Arg Val Ile Asn
                      170
               165
His Phe Phe Cys Asp Leu Pro Pro Leu Met Ser Leu Ser Cys Ser Ser
                   185
                                              190
           180
Thr Phe Phe Ser Gln Val Val Asn Phe Leu Val Val Cys Val Val Gly
                          200
                                              205
Gly Ala Ser Ala Leu Val Val Leu Val Ser Tyr Gly Tyr Ile Ile Ala
                      215
                                          220
Ala Val Met Arg Ile His Ser Thr His Gly Gln Met Lys Ala Phe Asn
                   230
                                      235
Thr Cys Ala Ser Tyr Leu Thr Thr Val Ile Leu Phe Tyr Gly Ser Gly
               245
                                  250
Leu Phe Ser Tyr Leu His Ser Asn Ala Gly Tyr Ser Gln Asp Lys Asn
           260
                              265
                                                  270
Lys Val Val Ser Met Phe Tyr Gly Ala Val Ile Pro Met Leu Asn Pro
                          280
                                              285
Ile Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Glu Ala Leu Lys Lys
                      295
                                          300
Leu Lys Lys Arg Lys Lys Gln Met Ser Cys Leu Cys Ala Met
                   310
<210> 1752
<211> 317
```

<212> PRT

<213> Mus musculus

<400> 1752

Met Ala Leu Thr Asn Thr Trp Asn Ser Ser Ser Val Thr Met Phe Ile Phe Leu Gly Phe Ser Asp His Pro Glu Leu Arg Ile Phe Leu Phe Leu Thr Phe Leu Ser Ile Tyr Leu Val Thr Leu Thr Trp Asn Leu Ala Leu Ile Phe Leu Ile Arg Gly Asp Ile His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Phe Val Asp Ile Cys Tyr Ser Ser Val Ala Pro Lys Met Leu Ser Asp Phe Phe Arg Glu Gln Lys Thr Ile Ser Phe Leu Gly Cys Gly Ala Gln Phe Phe Phe Phe Val Gly Leu Gly Leu Thr Glu Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Ser Asn Pro Leu Leu Tyr Thr Thr Ile Met Pro Gln Gly Leu Cys Met Arg Met Val Ala Gly Ala Tyr Leu Gly Gly Phe Leu Ser Ser Phe Ile Gln Ala Ser Ser Ile Phe Gln Leu His Phe Cys Gly Pro Asn Val Ile Asn His Phe Phe Cys Asp Leu Pro Pro Ile Leu Ala Leu Ser Cys Ser Asn Thr Phe Leu Ser Gln Val Val Asn Phe Leu Ile Val Ile Thr Val Gly Gly Thr Ser Phe Leu Ile Leu Leu Ile Ser Tyr Ser Tyr Ile Val Ser Ala Val Leu Lys Ile His Ser Val Arg Gly Arg Trp Lys Ala

```
Phe Asn Thr Cys Ala Ser His Leu Met Ala Val Thr Met Leu Phe Gly
                                    250
Thr Ala Leu Phe Met Tyr Leu Arg Pro Ser Ser Ser Tyr Ser Phe Ser
                                265
Arg Asp Lys Val Val Ser Val Phe Tyr Ser Leu Val Ile Pro Met Leu
        275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Leu
                        295
Trp Lys Val Met Glu Arg Lys Lys Val Phe Pro Asn Leu
<210> 1753
<211> 313
<212> PRT
<213> Mus musculus
<400> 1753
Met Glu Met Glu Asn Tyr Thr Arg Ile Lys Glu Leu Ile Phe Leu Gly
                                    10
Leu Thr Gln Ser Gln Gln Val Ser Ala Val Leu Phe Leu Phe Leu Leu
            20
                                25
Leu Val Tyr Val Thr Thr Leu Leu Gly Asn Leu Leu Ile Met Val Thr
                            40
                                                45
Val Thr Cys Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg
                                           60
                        55
Asn Leu Ser Val Ala Asp Ile Cys Phe Ser Ser Ile Thr Ala Pro Lys
                    70
                                        75
Val Leu Val Asp Leu Thr Ser Asn Arg Lys Thr Ile Ser Phe Asn Gly
               85
                                    90
Cys Leu Thr Gln Met Phe Phe His Leu Ile Gly Gly Val Asp Ala
                                105
            100
                                                    110
Phe Ser Leu Ser Val Met Ala Leu Asp Arg Tyr Val Ala Ile Ser Lys
                            120
                                                125
Pro Leu His Tyr Val Thr Ile Met Ser Arg Gly Arg Cys Ile Gly Leu
                        135
                                           140
Ile Val Ala Ser Trp Val Gly Gly Phe Ala His Ser Ile Val Gln Ile
                   150
                                       155
Ser Leu Leu Thr Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Thr
                                    170
                165
Phe Tyr Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys Thr Asp Ile
            180
                                185
                                                   190
Val Val Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Met Leu Thr Thr
                            200
                                                205
Leu Trp Phe Phe Leu Leu Val Ser Tyr Met Val Ile Leu Leu Leu
                        215
                                            220
Leu Lys Ser Gln Ser Gly Glu Gly Lys Lys Lys Ala Ile Ser Thr Cys
                    230
                                       235
Thr Thr His Ile Thr Val Val Thr Leu His Phe Val Pro Cys Ile Tyr
                245
                                   250
Val Tyr Ala Arg Pro Phe Thr Ala Leu Pro Thr Asp Lys Val Ile Ser
            260
                                265
Val Thr Phe Thr Val Ile Ser Pro Leu Leu Asn Pro Leu Ile Tyr Thr
                            280
                                               285
Leu Arg Asn Gln Glu Met Lys Ser Ala Met Arg Arg Leu Arg Lys
                        295
                                            300
Phe Arg Phe Ser His Trp Ile Glu Lys
```

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1754
Met Glu Leu Arg Asn Asp Thr Arg Val Lys Glu Phe Ile Phe Leu Gly
                                    10
1
Leu Thr Gln Ser Gln His Leu Ser Leu Val Leu Cys Leu Val Leu Cys
            20
                                25
Phe Val Tyr Val Thr Thr Leu Leu Gly Asn Leu Leu Ile Met Ile Ile
       35
                            40
Val Thr Phe Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg
                                            60
                        55
Asn Leu Ala Val Leu Asp Ile Cys Phe Ser Ser Ile Thr Ala Pro Lys
                    70
                                                            80
                                        75
Val Leu Val Asp Leu Leu Ala Lys Lys Lys Thr Ile Ser Tyr Ala Lys
               8.5
                                    90
Cys Met Thr Gln Met Phe Phe Phe His Leu Leu Gly Gly Ala Asp Ile
                                105
                                                    110
           100
Phe Ser Leu Ser Val Met Ala Phe Asp Arg Tyr Met Ala Ile Ser Lys
       115
                            120
                                                125
Pro Leu His Tyr Val Thr Ile Met Ser Ser Lys Arg Cys Thr Ala Leu
                        135
                                            140
Ile Ala Ala Ser Trp Val Gly Gly Phe Val His Ser Ile Val Gln Ile
                   150
                                        155
Ser Leu Leu Pro Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Thr
                                    170
                165
                                                        175
Phe Tyr Cys Asp Val Pro Gln Val Leu Lys Leu Ala Cys Thr Asp Thr
           180
                                185
                                                    190
Phe Val Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Leu Val Thr Thr
                            200
                                                205
       195
Leu Trp Phe Ile Phe Leu Leu Val Ser Tyr Met Val Ile Leu Met Met
                        215
                                            220
Leu Arg Ser Gln Ala Gly Glu Asp Arg Arg Lys Ala Ile Ser Thr Cys
                    230
                                        235
                                                            240
Thr Ser His Ile Thr Val Val Thr Leu His Phe Val Pro Cys Ile Tyr
               245
                                    250
Val Tyr Ala Arg Pro Phe Thr Ala Leu Pro Thr Asp Lys Ala Ile Ser
                                265
           260
                                                    270
Val Thr Phe Thr Val Ile Ser Pro Leu Leu Asn Pro Leu Ile Tyr Thr
                            280
                                                285
Leu Arg Asn Gln Glu Met Lys Ser Ala Ile Arg Arg Leu Lys Arg Lys
                        295
                                            300
Leu Thr Pro Leu Glu Lys
                    310
<210> 1755
<211> 311
<212> PRT
<213> Mus musculus
<400> 1755
Met Glu Leu Gly Asn His Thr Lys Val Thr Glu Phe Ile Phe Cys Gly
                5
                                    10
                                                        15
Leu Thr Gln Ser Gln Glu Leu Ser Leu Leu Phe Phe Phe Leu Ser
                                25
```

<210> 1754

```
Ile Val Tyr Ile Thr Thr Val Leu Val Asn Val Thr Ile Met Val Thr
Val Thr Trp Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg
Asn Leu Ser Val Leu Asp Ile Cys Phe Ser Ser Ile Thr Val Pro Lys
                    70
Val Leu Val Asp Leu Leu Ser Arg Arg Lys Thr Ile Ser Phe Asn Gly
                                    90
Cys Phe Thr Gln Ile Phe Phe Phe His Leu Leu Gly Gly Ala Asp Ile
                                105
Phe Ser Leu Ser Val Met Ala Phe Asp Arg Tyr Met Ala Ile Phe Arg
                            120
Pro Leu His Tyr Val Thr Ile Met Ser Arg Gly Arg Cys Thr Ala Leu
                        135
                                            140
Ile Ala Ala Ser Trp Val Gly Gly Phe Val His Ser Ile Val Gln Ile
                   150
                                        155
Phe Leu Leu Pro Leu Pro Phe Cys Gly Pro Asn Val Val Asp Ser
               165
                                    170
                                                        175
Phe Tyr Cys Asp Val Pro Gln Val Leu Lys Leu Ala Cys Thr Asp Thr
           180
                                185
                                                   190
Phe Val Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Leu Ile Thr Thr
       195
                            200
Leu Trp Phe Val Leu Leu Val Ser Tyr Thr Val Ile Leu Thr Met
                       215
                                            220
Leu Arg Ser His Thr Gly Glu Gly Arg Lys Lys Ala Ile Ser Thr Cys
                    230
                                       235
                                                            240
Thr Ser His Ile Thr Val Val Thr Leu His Phe Val Pro Cys Ile Tyr
                245
                                    250
Val Tyr Ala Arg Pro Phe Thr Ala Leu Pro Met Asp Arg Ala Val Ser
           260
                                265
Ile Thr Leu Asn Ile Ile Val Pro Val Leu Asn Pro Met Ile Tyr Thr
                           280
                                               285
Leu Arg Asn Gln Glu Met Lys Ser Ala Met Lys Arg Leu Arg Lys Arg
                       295
Leu Ile Leu Ser Glu Val Glu
```

<210> 1756

<211> 314

<212> PRT

<213> Mus musculus

<400> 1756

Met Ser Gln Ile Asn His Thr Asn Val Lys Glu Phe Val Phe Leu Ala 10 Leu Thr Arg Ile Arg Glu Leu Glu Phe Phe Leu Phe Ser Val Phe Phe 25 Leu Val Tyr Val Thr Thr Val Leu Gly Asn Thr Leu Ile Val Val Thr 40 45 Ile Thr Ala Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg 55 60 Asn Lys Ser Ile Leu Asp Ile Val Phe Ser Ser Ile Thr Val Pro Lys 70 75 Phe Leu Val Asp Leu Leu Ser Glu Arg Lys Ala Ile Ser Tyr Asn Gly 90 Cys Leu Thr Gln Ile Phe Phe Phe His Phe Ala Gly Gly Ala Asp Ile Phe Phe Leu Ser Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Ala Lys

```
120
Pro Leu His Tyr Val Thr Ile Met Arg Arg Glu Val Trp Leu Ala Leu
                        135
Val Val Ala Ser Trp Val Gly Gly Leu His Ser Ile Val Gln Ile
                   150
                                        155
Ile Leu Met Leu Pro Leu Pro Phe Cys Gly Pro Asn Thr Leu Asp Ala
                165
                                    170
Phe Tyr Cys Asp Ile Pro Gln Val Val Lys Leu Ala Cys Thr Asp Thr
           180
                                185
Phe Ala Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Leu Val Thr Leu
        195
                            200
Leu Trp Phe Phe Leu Leu Gly Ser Tyr Thr Ile Ile Leu Val Met
                        215
Leu Arg Ser His Ser Gly Glu Gly Arg Asn Lys Ala Leu Ser Thr Cys
                   230
                                        235
Thr Ser His Ile Met Val Val Thr Leu His Phe Val Pro Cys Val Tyr
                245
                                    250
Ile Tyr Cys Arg Pro Phe Thr Thr Leu Pro Met Asp Thr Ala Ile Ser
            260
                                265
Ile Asn Asn Thr Val Ile Thr Pro Met Leu Asn Pro Met Ile Tyr Thr
       275
                            280
                                                285
Leu Arg Asn Gln Glu Met Lys Ser Ala Met Lys Arg Leu Gln Arg Arg
                        295
Leu Gly Pro Ser Glu Ser Asn Lys Leu Gly
                    310
```

<210> 1757 <211> 320

<212> PRT <213> Mus musculus

<400> 1757

Met Gly Asp Arg Glu Thr Ser Asn His Ser Asp Met Thr Asp Phe Ile Leu Val Gly Phe Arg Val Ser Pro Glu Leu His Ile Leu Leu Phe Leu Leu Phe Leu Leu Val Tyr Ala Met Ile Leu Leu Gly Asn Leu Gly Met Met Ala Ile Ile Met Thr Asp Pro Arg Leu Asn Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Phe Ile Asp Leu Phe Tyr Ser Ser Val Ile Ala Pro Lys Ala Met Ser Asn Phe Trp Thr Glu Ser Lys Ser Ile Ser 8.5 Phe Ala Gly Cys Val Ala Gln Ile Phe Leu Phe Ala Leu Phe Ile Val Ala Glu Gly Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Asn Pro Leu Leu Tyr Ser Val His Met Ser Thr Arg Leu Cys Thr Gln Leu Val Ala Gly Ser Tyr Phe Cys Gly Cys Ile Ser Ser Val Leu Gln Thr Ser Met Thr Phe Thr Leu Ser Phe Cys Ala Ser Arg Ala Ile Asp His Phe Tyr Cys Asp Ser Arg Pro Leu Gln Arg Leu Ser Cys Ser Asp Ile Phe Ile His Lys Ile Val Ser Phe Ser Leu Ser Gly Ile

```
Ile Ile Leu Pro Thr Ile Thr Val Ile Ile Val Ser Tyr Met Tyr Ile
                        215
Val Ser Thr Val Leu Lys Ile Arg Ser Val Glu Gly Arg Lys Lys Ala
                    230
                                        235
Phe Ser Thr Cys Ser Ser His Leu Gly Val Val Ser Val Leu Tyr Gly
                245
                                    250
Ala Val Phe Phe Met Tyr Leu Thr Pro Asp Arg Phe Pro Glu Leu Ser
                                265
Lys Leu Ala Ser Leu Cys Tyr Ser Leu Val Thr Pro Met Leu Asn Pro
                            280
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Arg Asp Ala Leu Ser Lys
                        295
                                            300
Leu Leu Glu Lys Lys Lys Cys Ser Gly Ser Phe Phe Pro Phe Tyr Lys
                    310
```

<210> 1758 <211> 313 <212> PRT

<213> Mus musculus

<400> 1758 Met Gly Asp Arq Glu Thr Ser Asn His Ser Asp Met Thr Asp Phe Ile Leu Val Gly Phe Arg Val Ser Pro Glu Leu His Ile Leu Leu Phe Leu Leu Phe Leu Leu Val Tyr Ala Met Ile Leu Leu Gly Asn Leu Gly Met Met Ala Ile Ile Met Thr Asp Pro Arg Leu Asn Thr Pro Met Tyr Phe 55 Phe Leu Gly Asn Leu Ser Phe Ile Asp Leu Phe Tyr Ser Ser Val Ile Ala Pro Lys Ala Met Ser Asn Phe Trp Thr Glu Ser Lys Ser Ile Ser Phe Ala Gly Cys Val Ala Gln Leu Phe Leu Phe Ala Leu Phe Ile Val 105 Ala Glu Gly Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala 120 125 Ile Cys Asn Pro Leu Leu Tyr Ser Val His Met Ser Thr Arg Leu Cys 135 140 Thr Gln Leu Val Ala Gly Ser Tyr Phe Cys Gly Cys Ile Ser Ser Val 150 155 Leu Gln Thr Ser Met Thr Phe Thr Leu Ser Phe Cys Ala Ser Arg Ala 170 Ile Asp His Phe Tyr Cys Asp Thr Arg Pro Val Gln Arg Leu Ser Cys 185 190 Asn Asn Leu Phe Val His Lys Ile Val Ser Phe Ser Leu Ser Ser Ile 200 Ile Ile Leu Pro Thr Val Ile Val Ile Ile Val Ser Tyr Met Tyr Ile 215 Val Ser Thr Val Leu Lys Ile Arg Ser Val Glu Gly Arg Lys Lys Ala 235 Phe Ser Thr Cys Ser Ser His Leu Gly Val Val Ser Val Leu Tyr Gly 245 250 Ala Val Phe Phe Met Tyr Leu Thr Pro Asp Arg Phe Pro Glu Leu Ser 265 Lys Leu Ala Ser Leu Cys Phe Ser Leu Val Thr Pro Met Leu Asn Pro 280

Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Arg Asp Ala Leu Ser Lys

```
300
                        295
Leu Leu Glu Lys Lys Lys Phe Ile Leu
                    310
<210> 1759
<211> 312
<212> PRT
<213> Mus musculus
<400> 1759
Met Ala Asn His Ser Ser Val Thr Lys Phe Ile Leu Leu Gly Leu Thr
                                    10
Asn Asp Ile Asn Leu Gln Ala Val Leu Phe Leu Phe Leu Ile Leu Thr
Tyr Ile Leu Ser Val Met Gly Asn Ser Ala Ile Ile Leu Leu Thr Leu
Leu Asp His Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
Ala Phe Leu Glu Ile Ser Phe Thr Ser Val Phe Val Pro Lys Met Leu
                                        75
Ile Asn Ile Gly Thr Gly Asp Lys Thr Ile Ser Phe Ala Gly Cys Phe
                                    90
                                                         95
Thr Gln Tyr Phe Phe Ala Ile Leu Leu Gly Ala Thr Glu Phe Tyr Leu
           100
                                105
Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
        115
                            120
                                                125
His Tyr Thr Thr Ile Met Ser Arg Arg Leu Cys Phe Gln Leu Val Leu
                        135
                                            140
Ser Ser Trp Leu Ser Gly Phe Ile Val Val Ala Val Pro His Ala Met
                    150
                                        155
Thr Leu Gln Leu Pro Phe Cys Ala Ser Asn Ile Ile Asn His Tyr Cys
                                    170
                165
Cys Asp Tyr Thr Ile Leu Leu His Leu Ser Cys Ser Asp Thr His Phe
           180
                                185
                                                    190
Ile Glu Val Ile Gln Phe Leu Leu Ala Ala Val Thr Leu Ile Leu Thr
       195
                            200
Leu Leu Val Ile Leu Ser Tyr Thr His Ile Ile Lys Thr Ile Leu
                        215
Arg Ile Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Val Ser Leu Ser Tyr Gly Ser Cys Ile Phe Met
                                    250
                245
Tyr Ile Asn Pro Ser Phe Lys Asp Ala Ala Asn Phe Asn Lys Arg Val
            260
                                265
                                                    270
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Lys Gln Val Lys Ile Ala Phe Lys Asp Met Leu Ser
                                            300
                        295
Lys Thr Ile Ser Phe Phe Lys Lys
<210> 1760
<211> 315
<212> PRT
<213> Mus musculus
```

<400> 1760

```
Met Lys Leu Glu Gln Ser Arg Asn Tyr Thr Glu Leu Thr Asp Phe Ile
Leu Leu Gly Phe Trp Thr Ser Pro Glu Ala Gln Val Pro Leu Phe Leu
Leu Phe Leu Phe Ile Tyr Leu Val Ile Leu Leu Gly Asn Leu Ser Met
Leu Thr Val Ile Lys Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Gln Asn Leu Ser Phe Leu Asp Leu Cys Tyr Ser Thr Val Ile
                    70
Ala Pro Lys Thr Leu Ala Thr Ile Phe Ser Lys Glu Lys Lys Ile Ser
Tyr Asn Glu Cys Ala Thr Gln Phe Phe Phe Ala Leu Phe Val Gly
           100
                                105
Thr Glu Gly Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Ser Ala
       115
                            120
                                                125
Ile Cys Ser Pro Phe Leu Tyr Thr Val His Met Ser Gln Pro Ala Cys
                        135
                                            140
Ile Arg Leu Val Ala Gly Ser Tyr Ile Cys Gly Cys Ile Asn Ser Met
                    150
                                        155
Ile Gln Thr Gly Phe Thr Phe Ser Leu Arg Phe Cys Gly Glu Asn Arg
                                    170
                165
Leu Asp His Phe Phe Cys Asp Val Pro Ala Leu Ile Lys Ile Ser Cys
                                185
                                                    190
           180
Val Asp Thr Phe Val Asn Glu Ile Val Leu Phe Ile Leu Ser Ala Leu
                            200
       195
Ile Ile Ile Ser Thr Ile Thr Ile Ile Leu Val Ser Tyr Ala Tyr Ile
                        215
                                            220
Leu Ser Thr Val Leu Lys Ile Pro Ser Thr His Gly Arg Ser Lys Thr
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Ile Ala Val Val Ser Leu Phe Tyr Gly
                                    250
                245
Thr Val Phe Phe Met Tyr Ala Gln Pro Gly Ser Ile Ser Ser Pro Glu
                                265
Lys Ser Lys Ile Val Ala Val Phe Tyr Thr Leu Ile Ile Pro Met Leu
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Thr Glu Val Lys Ser Ala Leu
                       295
Lys Lys Thr Leu Leu Arg Lys Ile Ser Trp Gln
                    310
```

```
<210> 1761
```

<400> 1761

 Met
 Lys
 Leu
 Glu
 Gln
 Ser
 Arg
 Asn
 Tyr
 Thr
 Glu
 Leu
 Thr
 Asp
 Phe
 Ile

 Leu
 Leu
 Gly
 Phe
 Trp
 Thr
 Ser
 Pro
 Glu
 Ala
 Arg
 Val
 Pro
 Leu
 Phe
 Leu
 Phe
 Leu
 Asn
 Leu
 Gly
 Asn
 Leu
 Phe
 Leu
 Asn
 Leu
 Val
 Ile
 Asn
 Leu
 Ser
 Met
 Asn
 Leu
 Ser
 Met
 Asn
 Leu
 Ser
 Met
 Asn
 Leu
 Thr
 Phe
 Leu
 Asn
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe

 Leu
 Thr
 Val
 Ile
 Asn
 Leu
 Asn
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe

 Leu
 Thr
 Thr
 Leu
 Asn
 Leu
 Cys
 Tyr
 Ser
 Thr

<211> 315

<212> PRT

<213> Mus musculus

```
90
Tyr Asn Glu Cys Ala Thr Gln Phe Phe Phe Ala Leu Phe Val Gly
            100
                                105
Thr Glu Gly Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Ser Ala
                            120
                                                125
Ile Cys Ser Pro Phe Leu Tyr Thr Val His Met Ser Gln Pro Ala Cys
                        135
Ile Arg Leu Val Ala Gly Ser Tyr Ile Cys Gly Cys Ile Asn Ser Met
                    150
                                        155
Ile Gln Thr Gly Phe Thr Phe Ser Leu Arg Phe Cys Gly Glu Asn Arg
                                    170
Leu Asp His Phe Phe Cys Asp Val Pro Ala Leu Ile Lys Ile Ser Cys
                                185
                                                    190
Val Asp Thr Phe Val Asn Glu Ile Val Leu Phe Ile Leu Ser Ala Leu
                            200
Ile Ile Ile Ser Thr Ile Thr Ile Ile Leu Val Ser Tyr Ala Tyr Ile
                        215
Leu Ser Thr Val Leu Lys Ile Pro Ser Thr His Gly Arg Ser Lys Thr
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Ile Ala Val Val Ser Leu Phe Tyr Gly
                245
                                    250
Thr Val Phe Phe Met Tyr Ala Gln Pro Gly Ser Ile Ser Ser Pro Glu
                                265
Lys Ser Lys Ile Val Ala Val Phe Tyr Thr Leu Ile Ile Pro Met Leu
       275
                            280
                                                285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Thr Glu Val Lys Ser Ala Leu
                        295
Lys Lys Thr Leu Leu Arg Lys Ile Pro Trp His
                    310
```

<210> 1762

<211> 312

<212> PRT

<213> Mus musculus

<400> 1762

Met Lys Asn His Thr Glu Val Thr Val Phe Ile Leu Ala Gly Leu Thr 10 Asp Asp Pro Gln Trp Lys Val Val Leu Phe Ile Phe Leu Leu Thr 25 Tyr Leu Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 40 Val Asp Thr His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Phe Ser Tyr Thr Thr Thr Cys Ile Pro Lys Leu Leu 70 75 Val Thr Met Ala Thr Gly Asp Lys Thr Ile Ser Tyr Gly Asn Cys Val 90 Thr Gln Val Phe Phe Ala Phe Leu Phe Gly Ala Ser Glu Phe Tyr Leu 100 105 110 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Thr Ile Met Asn Asn Lys Val Cys Val Gln Leu Val Leu 135 140 Ser Cys Trp Leu Ala Gly Phe Phe Val Ile Phe Pro Pro Leu Val Leu 150 155 Gly Leu Asn Leu Glu Phe Cys Ala Ser Asn Ile Val Asp His Phe Tyr 170

```
Cys Asp Thr Thr Pro Leu Leu Gln Ile Ser Cys Thr Asp Thr Gln Leu
Leu Glu Thr Met Gly Phe Val Ser Ala Leu Val Thr Leu Leu Thr
        195
                            200
Leu Val Met Val Ile Ile Ser Tyr Thr Tyr Ile Ala Ile Thr Ile Leu
                        215
                                            220
Lys Ile Pro Ser Thr Glu Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                245
                                    250
Tyr Val Lys Pro Ser Val Lys Gln Arg Ile Ser Ile Ser Lys Gly Ile
            260
                                265
Ser Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Thr Leu Arg Asn Gln Gln Val Lys Lys Ala Phe Ile Thr Thr Val His
                        295
Arg Ile Ala Ser Ser Ser Lys Lys
```

<210> 1763 <211> 312 <212> PRT

<213> Mus musculus

<400> 1763 Met Lys Asn His Thr Arg Val Thr Ile Phe Ile Ile Ala Gly Leu Thr 10 Asp Asp Pro Gln Trp Lys Val Val Leu Phe Ile Phe Leu Leu Thr 25 Tyr Leu Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 40 Val Asp Thr His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Ile Ser Tyr Thr Thr Thr Cys Ile Pro Lys Leu Leu 75 Val Thr Met Ala Thr Gly Asp Lys Thr Ile Ser Tyr Asn Asn Cys Ala 90 Ala Gln Val Phe Phe Ala Phe Leu Leu Gly Ala Ser Glu Phe Tyr Leu 100 105 110 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Thr Ile Met Ser Asn Lys Val Cys Val Gln Leu Val Leu 135 140 Ser Cys Trp Leu Ile Ser Phe Leu Ile Ile Phe Pro Pro Leu Val Leu 150 155 Gly Leu Asn Leu Asp Phe Cys Ala Ser Asn Ile Ile Asp His Phe Tyr 165 170 Cys Asp Thr Thr Pro Leu Gln Ile Ser Cys Thr Asp Thr Gln Leu 180 185 190 Ile Glu Thr Ile Ala Phe Ile Ser Ala Leu Val Thr Leu Leu Thr 195 200 205 Leu Val Met Val Ile Ile Ser Tyr Thr Tyr Ile Ala Met Thr Ile Leu 215 220 Lys Ile Pro Ser Thr Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met 250 Tyr Val Lys Pro Ser Val Lys Gln Arg Val Ser Ile Ser Lys Gly Ile

260 265 Ser Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr 280 Thr Leu Arg Asn Gln Gln Val Lys Arg Ala Phe Ile Asn Thr Val His 295 Arg Ile Val Ser Phe Ser Lys Lys <210> 1764 <211> 316 <212> PRT <213> Mus musculus <400> 1764 Met Ile Ser Gln Arg Glu Met Lys Asn His Thr Arg Gln Ile Glu Phe 10 Ile Leu Leu Gly Leu Thr Asp Asn Pro Gln Leu Gln Thr Leu Ile Phe 25 Val Ser Leu Leu Asn Tyr Leu Leu Ser Met Leu Gly Asn Leu Ala 40 Ile Ile Ala Leu Thr Leu Leu Asp Pro Ile Leu Lys Thr Pro Met Tyr 55 Phe Phe Leu Arg Asn Phe Ser Phe Leu Glu Ile Leu Phe Thr Thr 75 Cys Ile Pro Arg Phe Leu Ile Ser Ile Val Thr Gln Glu Lys Thr Ile 90 Ser Tyr Asn Gly Cys Val Cys Gln Leu Phe Phe Tyr Ile Phe Leu Gly 100 105 Ala Thr Glu Phe Phe Leu Ala Thr Met Ser Tyr Asp Arg Tyr Ile 120 125 Ala Ile Cys Lys Pro Leu His Tyr Ala Ser Ile Met Asn Ser Lys Val 135 Cys His Gln Leu Val Leu Gly Ser Trp Val Thr Gly Phe Leu Val Ile 150 155 Phe Pro Pro Leu Ile Ile Gly Leu Asp Leu Asp Phe Cys Ala Ser Asn 170 Val Ile Asp His Phe Leu Cys Asp Val Ser Pro Leu Leu Gln Leu Ser 180 185 190 Cys Ser Asn Thr Asn Leu Leu Asp Leu Met Ala Phe Ile Leu Ala Leu 200 Met Thr Leu Ile Val Thr Leu Val Ile Val Ile Phe Ser Tyr Ala His 215 220 Ile Ala Lys Thr Ile Met Lys Phe Pro Ser Val Gln Gln Lys Lys 230 235 Ala Phe Ser Thr Cys Ser Ser His Met Ile Val Val Ser Leu Thr Tyr 245 250 Gly Ser Cys Ile Phe Ile Tyr Ile Lys Pro Ser Ala Asn Glu Arg Val 265 Thr Leu Ser Lys Gly Ile Ala Val Leu Asn Thr Ser Val Ala Pro Leu 280 Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys Gln Val Lys Gln Ala Cys Gly Val Val Leu Arg Lys Ile Phe Ser Ala Ser 310

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<210> 1766
<211> 309
<212> PRT
<213> Mus musculus
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Val Lys Asn Met

<400> 1766

Met Lys Thr Leu Ser Ser Ser Asn Asn Thr Ile Thr Gly Phe Ile Leu 1 5 cr 10 10 cr 15 Leu Gly Phe Pro Cys Pro Arg Glu Gly Gln Ile Leu Leu Phe Val Leu 20 25 cr 30 Phe Phe Ile Val Tyr Leu Leu Thr Leu Met Gly Asn Ala Ser Ile Ile

Ser Val Met Thr Pro Leu Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn

Lys Asp Met Lys Leu Ala Leu Arg Asn Val Leu Leu Gly Met Arg Ile

```
40
Cys Ala Val Cys Cys Asp Gln Lys Leu His Ser Pro Met Tyr Leu Leu
                        55
Leu Ala Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Ser Thr Val
                    70
                                        75
Pro Asn Met Leu Ala Asn Phe Leu Ser Glu Asn Lys Val Ile Ser Phe
               85
                                    90
Ala Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly Ser Thr
            100
                                105
                                                    110
Glu Cys Phe Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu Ala Ile
                            120
                                                125
Cys Arg Pro Leu His Tyr Pro Ser Leu Met Thr Gly Arg Leu Cys Asn
                        135
Ile Leu Val Ile Ser Cys Trp Val Leu Gly Phe Leu Trp Phe Pro Val
                    150
                                        155
Pro Ile Ile Ile Ser Gln Met Ser Phe Cys Gly Ser Arg Ile Ile
                165
                                    170
Asp His Phe Leu Cys Asp Pro Gly Pro Leu Leu Ala Leu Thr Cys Ser
                                185
                                                    190
Arg Ala Pro Leu Met Glu Phe Phe Trp Ala Ile Leu Ser Ser Met Leu
                            200
                                                 205
Leu Phe Ile Pro Phe Phe Cys Ile Met Gly Ser Tyr Ile Leu Val Leu
                        215
Arg Ala Val Phe Arg Val Pro Ser Arg Asp Gly Gln Lys Lys Ala Phe
                    230
                                        235
Ser Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ser
                245
                                    250
Val Met Ile Met Tyr Leu Ser Pro Thr Ser Glu His Glu Ala Gly Met
            260
                                265
Gln Lys Leu Val Thr Leu Phe Tyr Ser Val Val Thr Pro Leu Ile Asn
                            280
Pro Val Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Asn Ala Leu Gln
                        295
                                            300
Lys Ile Leu Lys Thr
305
<210> 1767
<211> 311
<212> PRT
<213> Mus musculus
<400> 1767
Met Lys Ala Phe Ser Ser Pro Ser Asn Ser Ser Ile Ile Thr Gly Phe
                                    10
Ile Leu Leu Gly Phe Pro Cys Pro Lys Glu Gly Gln Ile Leu Leu Phe
            20
                                25
Val Leu Phe Phe Ile Ile Tyr Ile Leu Thr Leu Met Gly Asn Ala Ser
        35
Ile Ile Cys Ala Val Cys Tyr Asp Lys Leu His Ser Pro Met Tyr
                        55
Leu Leu Ala Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Ser
                    70
                                        75
Thr Val Pro Asn Met Leu Ala Asn Phe Leu Ser Asp Thr Lys Val Ile
                                    90
Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly
            100
                                105
                                                    110
Ser Thr Glu Cys Phe Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu
```

120

```
Ala Ile Cys Arg Pro Leu His Tyr Pro Ser Leu Met Thr Gly Arg Leu
                        135
Cys Asn Ile Leu Val Ile Ser Cys Trp Met Leu Gly Phe Leu Trp Phe
                    150
Pro Val Pro Ile Ile Ile Ser Gln Met Ser Phe Cys Gly Ser Arg
                                    170
Ile Ile Asp His Phe Leu Cys Asp Pro Gly Pro Leu Leu Ala Leu Thr
                                185
Cys Val Arg Asn Ser Leu Ile Glu Met Thr Ser Ser Thr Leu Ser Ser
                            200
        195
Leu Leu Phe Val Pro Phe Phe Phe Ile Met Gly Ser Tyr Ala Leu
                        215
                                            220
Val Met Arg Ala Val Leu Arg Val Pro Ser Ala Ala Gly Arg Arg Lys
                    230
Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr
                245
                                    250
Gly Ser Val Met Val Met Tyr Val Ser Pro Thr Ser Glu His Ala Ala
Gly Val Gln Lys Leu Val Thr Leu Phe Tyr Ser Val Val Thr Pro Leu
                            280
Leu Asn Pro Val Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys His Ala
                        295
                                            300
Met Lys Lys Leu Leu Lys Met
```

<210> 1768 <211> 311 <212> PRT

<213> Mus musculus

<400> 1768

Met Lys Thr Phe Ser Ser Pro Ser Asn Ser Ser Thr Thr Thr Gly Phe Ile Leu Leu Gly Phe Pro Cys Pro Arg Glu Gly Gln Ile Leu Leu Phe 25 Val Leu Phe Ser Ile Val Tyr Leu Leu Thr Leu Met Gly Asn Thr Cys Ile Ile Phe Ala Val Cys Trp Asp Gln Arg Leu His Thr Pro Met Tyr 55 Leu Leu Leu Ala Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Ser 70 Thr Val Pro Asn Met Leu Ala Asn Phe Leu Ser Asp Thr Lys Val Ile Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly 105 110 Ser Thr Glu Cys Leu Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu 120 125 Ala Ile Cys Arg Pro Leu His Tyr Pro Ala Leu Met Thr Gly Ser Leu 140 Cys Asn Ile Leu Val Ile Ser Cys Trp Val Leu Gly Phe Leu Trp Phe 155 Pro Val Pro Ile Ile Ile Ser Gln Met Ser Phe Cys Gly Ser Arg 170 Ile Ile Asp His Phe Leu Cys Asp Pro Gly Pro Leu Leu Ala Leu Thr 180 185 Cys Ser Arg Ala Pro Leu Met Glu Val Phe Trp Thr Ile Ile Thr Ser 200 Leu Ile Leu Phe Val Pro Phe Leu Phe Ile Met Gly Ser Tyr Thr Leu

```
215
Val Leu Arq Ala Val Phe Arg Val Pro Ser Arg Asp Gly Gln Lys Lys
                                        235
                    230
Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Leu Leu Phe Tyr
                245
                                    250
Gly Ser Val Met Ile Met Tyr Leu Ser Pro Thr Ser Glu His Glu Ala
                                265
Gly Met Gln Lys Leu Val Thr Leu Phe Tyr Ser Val Val Thr Pro Leu
                            280
Val Asn Pro Val Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys His Ala
                        295
Leu Gln Lys Ile Leu Arg Thr
<210> 1769
<211> 312
<212> PRT
<213> Mus musculus
<400> 1769
Met Thr Ser Ala Arg Asn Ala Ser His Thr Val Ser His Phe Ile Leu
                                    10
Leu Gly Phe Pro Cys Arg Arg Glu Ile Gln Ile Phe Leu Phe Ser Ile
                                25
Phe Phe Met Ile Tyr Ile Leu Thr Leu Leu Gly Asn Met Ala Ile Val
                            40
Tyr Ala Val Tyr Trp Asp His Arg Leu His Thr Pro Met Tyr Ile Leu
                        55
Leu Ala Asn Phe Ser Phe Leu Glu Ile Cys Tyr Val Asn Ser Asp Val
                                        75
                    70
Pro Asn Met Leu Val Asn Phe Leu Ser Thr Thr Lys Thr Ile Ser Phe
                                    90
Thr Arg Cys Leu Leu Gln Leu Tyr Phe Phe Phe Ser Leu Gly Thr Thr
           100
                                105
                                                    110
Glu Cys Leu Phe Leu Ser Ile Met Ala Tyr Asp Arg Phe Leu Ala Ile
       115
                            120
                                                125
Cys Arg Pro Leu His Tyr Pro Thr Val Met Thr Thr Met Phe Cys Gly
                        135
                                            140
Asn Leu Val Ile Phe Cys Trp Val Tyr Gly Phe Leu Trp Phe Leu Ile
                    150
                                        155
Pro Val Ile Leu Ile Thr Gln Leu Pro Phe Cys Gly Pro Asn Val Ile
               165
                                    170
Asp Asp Phe Leu Cys Asp Leu Gly Pro Leu Leu Ala Leu Ala Ser Val
           180
                                185
Cys Val Pro Ile Pro Gly Thr Val Leu Ile Cys Gly Thr Met Ser Ser
                            200
       195
Leu Leu Ile Phe Gly Thr Phe Phe Tyr Ile Ile Gly Ser Tyr Thr Leu
                        215
                                            220
Val Leu Arg Ala Val Ile Arg Met Pro Ser Ser Ala Gly Ser Lys
                    230
                                        235
Ala Phe Ser Thr Cys Ser Ser His Leu Ala Val Val Phe Leu Phe Tyr
                245
                                    250
Gly Ser Val Met Ile Thr Tyr Val Ser Pro Gly Ser Gly Gln Ala Lys
                                265
Gly Met Gln Lys Phe Thr Thr Leu Phe Tyr Ser Val Met Thr Pro Phe
                            280
Phe Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Asp Ala
```

```
<210> 1770
<211> 308
<212> PRT
<213> Mus musculus
<400> 1770
Met Glu Thr Glu Asn Arg Thr Val Val Thr Glu Phe Ile Leu Ile Gly
                                    10
1
Leu Thr Gln Ser His Asp Ile Gln Arg Leu Val Phe Val Leu Ser Leu
                                25
Ile Phe Tyr Ile Ile Ile Leu Pro Gly Asn Ile Leu Ile Ile Leu Thr
                            40
Ile Arg Ser Asp Pro Gly Leu Thr Ala Pro Leu Tyr Phe Phe Leu Gly
Asn Leu Ala Phe Leu Asp Ala Ser Tyr Ser Phe Ile Val Ala Pro Arg
                    70
Met Leu Val Asp Phe Phe Ser Glu Lys Lys Ile Ile Ser Tyr Lys Ala
                                    90
                85
Cys Ile Thr Gln Leu Phe Phe Leu His Phe Leu Gly Gly Glu Gly
                                105
                                                     110
Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ile Ala Ile Cys Arg
                            120
Pro Leu His Tyr Ser Thr Val Met Ser Pro Arg Ala Cys Tyr Val Met
                        135
Leu Leu Ala Leu Trp Leu Gly Gly Phe Ile His Ser Ile Ile Gln Val
                    150
                                        155
Val Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro Asn His Leu Asp Asn
                165
                                    170
                                                         175
Phe Phe Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys Thr Asp Thr
            180
                                185
                                                    190
Phe Ala Val Glu Leu Leu Met Ile Phe Asn Ser Gly Leu Leu Thr Leu
        195
                            200
Leu Cys Phe Leu Gly Leu Leu Thr Ser Tyr Ala Val Ile Leu Cys His
                        215
                                            220
Val His Arg Ser Ala Ser Glu Gly Lys Asn Lys Ala Ile Ser Thr Cys
                    230
                                        235
                                                             240
Thr Thr His Val Ile Ile Ile Phe Ile Met Phe Gly Pro Ala Ile Phe
                                    250
Ile Tyr Thr Arg Pro Phe Thr Ala Leu Ser Ala Asp Lys Val Val Ser
            260
                                265
                                                    270
Phe Phe His Thr Val Ile Phe Pro Leu Met Asn Pro Val Ile Tyr Thr
                            280
Leu Arg Asn Gln Glu Val Lys Thr Ser Met Lys Lys Leu Ile Ile Arg
    290
                        295
His Ile Ile Cys
305
<210> 1771
<211> 313
<212> PRT
<213> Mus musculus
<400> 1771
```

Met Glu Pro Ala Asn Asp Thr Thr Val Thr Glu Phe Ile Leu Thr Gly

Leu Lys Lys Val Val Gly Gly Ser

```
10
Leu Ser Gln Thr Arg Glu Val Gln Leu Val Leu Phe Val Ile Phe Leu
                                25
Ser Phe Tyr Leu Phe Ile Leu Pro Val Asn Ile Leu Ile Ile Cys Thr
                            40
Ile Arg Leu Asp Ser His Leu Ser Ser Pro Met Tyr Phe Leu Leu Ala
                        55
Asn Leu Ala Phe Leu Asp Ile Trp Tyr Ser Ser Ile Thr Ala Pro Lys
                    70
                                        75
Met Leu Val Asp Phe Phe Val Glu Arg Lys Ile Ile Ser Phe Gly Gly
                85
                                    90
Cys Ile Ala Gln Leu Phe Phe Leu His Phe Val Gly Ala Ser Glu Met
            100
                                105
                                                    110
Phe Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Ala Ala Ile Cys Arg
                            120
        115
                                                125
Pro Leu His Tyr Ala Thr Ile Met Asn Arg Arg Leu Cys Cys Ile Leu
                        135
                                            140
Val Ala Leu Ser Trp Thr Gly Gly Phe Val His Ser Ile Ile Gln Val
                    150
                                        155
Ala Leu Ile Val Arg Leu Pro Phe Cys Gly Pro Asn Glu Leu Asp Asn
                                    170
                165
                                                        175
Tyr Phe Cys Asp Ile Thr Gln Val Val Arg Ile Ala Cys Ala Asn Thr
            180
                                185
                                                    190
Phe Leu Glu Glu Met Val Met Ile Phe Ser Ser Gly Leu Ile Ser Val
        195
                            200
                                                 205
Val Cys Phe Ile Ala Leu Leu Met Ser Tyr Ala Phe Leu Leu Thr Met
                        215
                                            220
Leu Lys Lys His Ser Ser Ser Gly Glu Ser Thr Ser Arg Ala Ile Ser
                    230
                                        235
Thr Cys Tyr Ser His Ile Thr Ile Val Val Leu Met Phe Gly Pro Ser
                245
                                    250
Ile Tyr Ile Tyr Ala Arg Pro Phe Asp Ser Phe Ser Leu Asp Lys Val
            260
                                265
Val Ser Val Phe His Thr Val Ile Phe Pro Leu Leu Asn Pro Ile Ile
                            280
                                                285
Tyr Thr Leu Arg Asn Lys Glu Val Lys Ala Ala Met Arg Lys Leu Val
                        295
Asn Arg Tyr Ile Phe Cys Lys Glu Lys
                    310
<210> 1772
<211> 308
<212> PRT
<213> Mus musculus
<400> 1772
Met Glu Thr Glu Asn Arg Thr Val Val Thr Glu Phe Ile Phe Thr Gly
                                    10
Leu Thr Glu Ser Leu Asp Ile Gln Arg Leu Val Phe Val Leu Ser Leu
                                25
Ile Phe Tyr Ile Ile Ile Leu Pro Gly Asn Val Phe Ile Ile Leu Thr
                            40
Ile Ile Ser Asp Pro Gly Leu Thr Ala Pro Leu Tyr Leu Phe Leu Gly
                        5.5
Asn Leu Ala Phe Leu Asp Ala Ser Tyr Ser Phe Ile Val Ala Pro Arg
                    70
```

Met Leu Ile Asp Ile Phe Ser Glu Lys Lys Ile Ile Ser Tyr Lys Ala

```
Cys Ile Thr Gln Leu Phe Phe Leu His Phe Leu Gly Gly Glu Phe
Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ile Ala Ile Cys Arg
                            120
Pro Leu Tyr Tyr Ser Thr Val Met Asn Pro Arg Val Cys Tyr Val Met
Leu Leu Ala Pro Trp Leu Gly Gly Phe Ile His Ser Ile Ile Gln Val
                   150
                                       155
Val Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro Asn His Leu Asp Asn
                165
                                    170
                                                        175
Phe Phe Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys Thr Asp Thr
            180
                                185
                                                    190
Phe Ala Val Glu Leu Leu Met Ile Phe Asn Ser Gly Leu Leu Thr Leu
                            200
Val Cys Phe Leu Gly Leu Leu Thr Ser Tyr Ala Val Ile Leu Cys His
                       215
                                            220
Val His Arg Ser Ala Ser Glu Gly Lys Asn Lys Ala Ile Ser Thr Cys
                    230
                                       235
Thr Thr His Val Ile Ile Ile Phe Leu Met Phe Gly Pro Ala Ile Phe
                245
                                    250
Ile Tyr Thr Arg Pro Phe Thr Ala Leu Ser Ala Asp Lys Val Val Ser
                                265
Phe Phe His Thr Val Ile Phe Pro Leu Leu Asn Pro Val Ile Tyr Thr
                            280
Leu Arg Asn Gln Glu Val Lys Thr Ser Met Lys Lys Leu Phe Ile Arg
   290
                       295
Gln Val Ile Cys
```

<210> 1773 <211> 312 <212> PRT

<213> Mus musculus

<400> 1773

Met Asn Asn His Ser Ser Ser Ser Ser Ser Thr Ser Asp Phe Ile Leu 10 Leu Gly Leu Ser Thr Asn Pro Trp Met Gln Lys Pro Leu Phe Gly Ile 25 Phe Ile Ile Met Tyr Leu Val Thr Val Met Gly Asn Val Leu Ile Ile 40 Leu Val Ile Arg Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe 55 Leu Ser Asn Leu Ser Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val 75 Pro Lys Met Leu Val Asn Phe Leu Ser Glu Thr Lys Thr Ile Ser Tyr 90 Val Gly Cys Leu Val Gln Met Tyr Phe Phe Met Ala Leu Gly Asn Thr 105 110 Asp Ser Tyr Leu Leu Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile 120 125 Cys Asn Pro Leu His Tyr Asp Val Val Met Arg Pro Gln Arg Cys Leu 135 140 Leu Met Leu Leu Gly Ser Cys Thr Ile Ser His Leu His Ala Leu Phe 150 Arg Val Leu Leu Met Ser Arg Leu Ser Phe Cys Ala Ser His Val Ile 170 Lys His Phe Phe Cys Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser

```
185
            180
Asp Thr Ser Ser Ser Gln Ile Val Val Met Thr Glu Thr Leu Ala Val
                            200
        195
                                                205
Ile Val Thr Pro Phe Leu Cys Ile Leu Phe Ser Tyr Met Arg Ile Ile
                        215
                                            220
Val Thr Val Leu Arg Ile Pro Ser Ala Ala Gly Lys Trp Lys Ala Phe
                    230
                                        235
Ser Thr Cys Gly Ser His Leu Thr Val Val Val Leu Phe Tyr Gly Ser
                                                        255
                                    250
                245
Ile Ile Tyr Val Tyr Phe Arg Pro Leu Ser Met Tyr Ser Val Val Lys
            260
                                265
Asp Arg Val Ala Thr Val Met Tyr Thr Val Val Thr Pro Met Met Asn
                            280
        275
Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Gly Leu Arg
                        295
                                            300
Lys Leu Met Gly Lys Val His Leu
305
                    310
<210> 1774
<211> 318
<212> PRT
<213> Mus musculus
<400> 1774
Met Asp Gly Ser Thr Leu Gln Ser Pro Gln Gln Asn His Ser Thr Phe
                                    10
Val Ala Phe Ile Leu Leu Gly Phe Ser Asp Val Pro Asn Leu Gln Glu
                                25
Phe Leu Phe Gly Leu Phe Leu Met Val Tyr Leu Ile Ile Leu Met Gly
                            40
Asn Ser Leu Ile Ile Ile Ile Arg Ala Asp Pro Ser Leu Gln Thr
                        55
Pro Met Tyr Phe Phe Leu Gly Asn Phe Ser Phe Leu Glu Met Cys Tyr
                    70
                                        75
                                                             80
Val Ser Val Thr Leu Pro Arg Leu Leu Thr Asp Leu Tyr Arg Gln Asp
                85
                                    90
Arg Ile Ile Ser Phe Met Ala Cys Ala Thr Gln Met Tyr Phe Phe Leu
            100
                                105
Ile Phe Gly Ala Thr Glu Cys Phe Ile Leu Thr Ala Met Ala Tyr Asp
        115
                            120
                                                125
Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Pro Leu Ile Met Asn
   130
                        135
                                            140
Asn Ser Leu Cys Ile Gln Leu Ala Ala Gly Cys Trp Ile Ser Gly Val
                    150
                                        155
Pro Val His Ile Gly Phe Thr Tyr Trp Ile Phe Ser Leu Pro Phe Cys
                                    170
                165
                                                        175
Gly Ser Asn Gln Leu Asn His Phe Phe Cys Asp Ile Pro Pro Val Leu
            180
                                185
                                                    190
Thr Leu Ala Cys Gly Asp Thr Phe Met Ile Glu Met Leu Ile Tyr Val
                            200
                                                205
Ile Ala Leu Leu Val Val Thr Ile Pro Phe Met Leu Ile Leu Ala Ser
                        215
                                            220
Tyr Val Lys Ile Ile Ser Ser Ile Leu Lys Leu Pro Ser Ala Thr Gly
                    230
                                        235
                                                             240
Arg Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val Val Ala
                                    250
                245
Leu Phe Phe Gly Ser Gly Ile Ile Thr Tyr Leu Arg Pro Lys Ser Ser
```

His Ser Ala Gly Val Asp Lys Phe Leu Ser Leu Phe Tyr Thr Val Val 280 Thr Pro Met Phe Asn Pro Met Ile Tyr Cys Leu Arg Asn Lys Asp Val 295 300 Met Ile Ala Leu Lys Lys Ile Phe Leu Arg Cys Phe Met Leu 310 <210> 1775 <211> 310 <212> PRT <213> Mus musculus <400> 1775 Met Asp Glu Gly Asn Cys Ser Ser Asn Thr Glu Phe Val Leu Leu Gly Ile Thr Asn Asn Pro Ser Met Lys Val Gly Leu Phe Ile Val Phe Leu Ile Ile Tyr Leu Ile Ile Leu Val Ala Asn Ile Gly Met Ile Val Leu 40 Ile Lys Leu Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Phe Ser Asp Leu Cys Tyr Ser Thr Ala Val Gly Pro Lys 70 75 Met Leu Val Asp Leu Met Val Lys Gln Lys Ile Ile Pro Phe Val Gly 90 Cys Ala Leu Gln Phe Phe Thr Cys Ile Phe Val Asp Ala Glu Cys 100 105 110 Met Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Asn 120 125 Pro Leu Met Tyr Val Val Gly Met Ser Ser Lys Phe Cys Tyr Gln Leu 135 140 Leu Ala Gly Val Tyr Leu Val Gly Met Ile Asp Thr Val Ile His Thr 150 155 Ile Met Thr Phe Gly Leu Cys Phe Tyr Gly Ser Asn Glu Ile Asn His 165 170 Phe Phe Cys Asp Ile Pro Pro Ile Leu Leu Ser Cys Ser Asp Thr 180 185 190 Gln Thr Asn Glu Leu Ile Thr Phe Val Ile Phe Gly Phe Ile Glu Leu 195 200 205 Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser 215 220 Val Leu Lys Ile Arg Ser Thr Asp Gly Arg Phe Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu 245 250 Phe Met Tyr Phe Arg Pro Ala Ser Ala Tyr Ser Leu Asp Gln Asp Lys 265 Ile Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Gln Glu Ala Leu Gln Lys Leu 290 Lys Lys Ile Phe Phe

<210> 1776

<211> 310

<212> PRT

```
<400> 1776
Met Asp Lys Arg Asn Cys Ser Ser Val Pro Glu Phe Leu Leu Gly
                                    10
Ile Thr Asn Lys Pro Glu Met Lys Val Ala Leu Phe Ile Val Phe Leu
                                25
Ile Val Tyr Leu Thr Ile Leu Leu Thr Asn Val Gly Met Ile Thr Leu
                            40
Ile Arg Met Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ser Phe Ser Asp Leu Cys Tyr Ser Thr Ala Val Gly Pro Lys
                    70
                                        75
Met Leu Leu Asp Leu Leu Glu Asp Asn Asn Pro Ile Ser Phe Val Gly
                                    90
Cys Phe Leu Gln Leu Leu Ile Val Ser Ile Phe Ile Asp Val Glu Cys
                                105
                                                    110
Met Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Asn
                            120
                                                125
Pro Leu Met Tyr Ala Val Asp Met Ser Ser Arg Val Cys Tyr Gln Phe
                        135
                                            140
Leu Thr Ala Ile Tyr Val Phe Gly Thr Ile Asp Gly Phe Ile His Thr
                    150
                                        155
Ser Leu Ala Phe Ser Leu Cys Phe Cys His Ser Thr Gln Ile Asn His
                165
                                    170
Phe Phe Cys Asp Leu Pro Pro Val Leu Leu Ser Cys Ser Asp Thr
            180
                                185
                                                    190
His Ile Asn Glu Leu Val Leu Phe Met Leu Phe Gly Phe Ile Glu Leu
        195
                            200
                                                205
Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser
                                            220
                        215
Val Leu Lys Ile Ser Ser Thr Gly Gly Trp Phe Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ala Val Gly Ile Phe Gln Gly Thr Met Leu
                245
                                    250
Phe Met Tyr Phe Arg Pro Ser Ser Ala Tyr Ser Leu Asp Gln Asp Lys
            260
                                265
Met Thr Ser Ile Phe Tyr Leu Leu Val Ile Pro Met Ile Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Val Arg Leu
                        295
Arg Ser Lys Trp Trp Phe
<210> 1777
<211> 309
<212> PRT
<213> Mus musculus
<400> 1777
Met Asp Ile Gly Asn Cys Ser Leu Asn Glu Phe Ile Phe Val Gly Val
                                    10
Thr Asn Asn Pro Glu Met Lys Gly Thr Leu Phe Thr Ile Phe Leu Leu
                                25
Ile Tyr Leu Ile Asn Leu Leu Gly Asn Ile Gly Met Ile Ile Leu Ile
                            40
Arg Met Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser His
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Leu Ser Phe Cys Asp Leu Cys Tyr Ser Thr Ala Ile Gly Pro Lys Met
Leu Leu Asp Met Phe Gly Lys Asn Lys Ser Ile Pro Phe Trp Gly Cys
                                    90
Ala Leu Gln Leu Phe Ile Phe Cys Val Phe Ala Asp Ser Glu Cys Val
                                105
Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Gln Ala Ile Ser Asn Pro
                            120
                                                125
Leu Leu Tyr Thr Ala Asn Met Ser Ser Arg Lys Cys Phe Met Phe Met
                        135
                                            140
Ala Gly Val Tyr Leu Val Gly Thr Ala Asp Ala Leu Ile His Thr Thr
                    150
                                        155
Leu Ala Phe Arg Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His Phe
                165
                                    170
Phe Cys Asp Leu Pro Pro Leu Tyr Leu Leu Ser Cys Ser Asp Thr Gln
            180
                                185
                                                    190
Val Asn Tyr Leu Ala Leu Phe Thr Ile Tyr Gly Phe Leu Glu Leu Ser
        195
                            200
Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser Ile
                        215
                                            220
Leu Lys Ile Arg Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr Cys
                    230
                                        235
Thr Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu Phe
                245
                                    250
Thr Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys Met
            260
                                265
Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Lys Lys Ile Lys
                        295
Arg Lys Arg Trp Phe
```

<210> 1778 <211> 307

<212> PRT <213> Mus musculus

<400> 1778

Met Asn Ile Gly Asn Cys Ser Leu Asn Glu Phe Ile Phe Val Gly Val Thr Asn Asn Pro Glu Met Lys Gly Thr Leu Phe Thr Ile Phe Leu Leu 25 Ile Tyr Leu Ile Asn Leu Leu Gly Asn Ile Gly Met Ile Ile Leu Ile 40 4.5 Arg Met Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser His 55 Leu Ser Phe Cys Asp Leu Cys Tyr Ser Thr Ala Ile Gly Pro Lys Met 75 Leu Val Asp Met Phe Gly Lys Asn Lys Ser Ile Pro Phe Trp Gly Cys 90 Ala Val Gln Phe Phe Ile Ser Cys Thr Phe Ala Asp Ser Glu Cys Val 105 Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Gln Ala Ile Ser Asn Pro 120 125 Leu Leu Tyr Thr Ala Asn Met Ser Ser Arg Lys Cys Phe Met Phe Met Ala Gly Val Tyr Leu Val Gly Thr Ser Asp Ala Leu Ile His Thr Thr

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145
                    150
Leu Ala Phe Arg Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His Phe
                165
                                    170
Phe Cys Asp Leu Pro Pro Leu Tyr Leu Leu Ser Cys Ser Asp Thr Gln
                                185
                                                    190
Val Asn Tyr Leu Ala Leu Phe Thr Ile Tyr Gly Phe Leu Glu Leu Ser
                            200
Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser Val
                        215
Leu Lys Ile Arg Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr Cys
                    230
                                        235
Thr Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu Phe
                                    250
Thr Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys Met
                                                     270
Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Gly Lys Met Lys
                        295
Arg Lys Arg
305
<210> 1779
<211> 310
<212> PRT
<213> Mus musculus
<400> 1779
Met Arg Ala Asn Gln Thr Trp Ile Thr Glu Val Thr Leu Leu Gly Phe
Gln Ala Asp Leu Ser Val Glu Cys Phe Leu Phe Gly Leu Phe Ser Leu
Phe Tyr Ser Phe Thr Leu Leu Gly Asn Gly Ile Ile Leu Val Val Ile
                            40
Cys Leu Asp Asn Arg Leu His Ile Pro Met Tyr Phe Phe Leu Ser His
                        55
Leu Ala Ile Val Asp Met Ser Tyr Ala Ser Asn Asn Val Pro Lys Met
Leu Ala Asn Leu Val Thr Gln Arg Arg Thr Ile Ser Phe Ile Leu Cys
Ile Met Gln Thr Phe Leu Tyr Leu Ala Phe Ala Cys Thr Glu Cys Leu
            100
Ile Leu Val Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                            120
                                                125
Leu His Tyr Thr Val Ile Met Ser Trp Lys Val Cys Thr Ile Leu Ala
                        135
                                            140
Ala Val Ser Trp Ile Ala Gly Phe Leu Leu Ala Leu Val His Leu Val
                    150
Leu Ile Leu Lys Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe
                                    170
Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr
            180
                                185
                                                    190
Leu Asn Gln Val Val Ile Leu Ala Ala Cys Val Phe Ile Leu Val Gly
                            200
                                                205
Pro Leu Cys Leu Val Leu Val Ser Tyr Thr Arg Ile Leu Val Thr Ile
                                            220
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Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys

235

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Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
Met Tyr Met Ala Pro Lys Ser Gln His Pro Glu Leu Gln Gln Lys Ile
Leu Ser Leu Phe Tyr Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
Tyr Cys Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Arg Arg Ser Leu
Trp Lys Glu Arg Pro Met
<210> 1780
<211> 310
<212> PRT
<213> Mus musculus
<400> 1780
Met Arg Ala Asn Gln Thr Trp Ile Thr Glu Val Thr Leu Leu Gly Phe
Gln Ala Asp Leu Ala Val Glu Cys Phe Leu Phe Gly Leu Phe Ser Leu
Phe Tyr Ser Phe Thr Leu Leu Gly Asn Gly Ile Ile Leu Val Val Ile
Cys Leu Asp Asn Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His
Leu Ala Ile Val Asp Met Ser Tyr Ala Ser Asn Asn Val Pro Lys Met
Leu Ala Asn Leu Val Thr Gln Arg Arg Thr Ile Ser Phe Ile Pro Cys
Ile Met Gln Thr Phe Leu Tyr Leu Ala Phe Ala Ser Ile Glu Cys Leu
            100
Ile Leu Val Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                            120
Leu His Tyr Thr Val Ile Met Ser Trp Arg Val Cys Thr Ile Met Ala
                        135
                                            140
Ala Val Ser Trp Ile Val Gly Phe Leu Leu Ala Leu Val His Leu Ile
                    150
                                        155
Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Lys Val Asn His Phe
                165
                                    170
Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr
                                185
                                                    190
Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Ile Leu Val Gly
Pro Leu Cys Met Val Leu Val Ser Tyr Thr Arg Ile Leu Val Ala Ile
                                            220 .
Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
                245
                                    250
Met Tyr Met Ala Pro Lys Ser Gln His Pro Glu Met Gln Gln Lys Ile
                                265
Leu Ser Leu Phe Tyr Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
                                                285
Tyr Cys Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Arg Arg Ser Leu
    290
                        295
                                            300
Leu Lys Glu Arg Ser Met
305
                    310
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<211> 310
<212> PRT
<213> Mus musculus
<400> 1781
Met Lys Ala Asn Gln Thr Trp Ile Thr Glu Val Thr Leu Leu Gly Phe
                                     10
Gln Ala Asp Leu Ala Val Glu Cys Phe Leu Phe Gly Leu Phe Ser Leu
Phe Tyr Ser Phe Thr Leu Leu Gly Asn Gly Ile Ile Phe Gly Ile Ile
        35
                             40
Cys Leu Asp His Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His
                         55
Leu Ala Ile Val Asp Met Ser Tyr Ala Ser Asn Asn Val Pro Lys Met
                    70
Leu Ala Asn Leu Val Thr Gln Arg Arg Thr Ile Ser Phe Ile Pro Cys
                                     90
Leu Met Gln Thr Phe Leu Tyr Leu Ala Phe Ala His Ile Glu Cys Leu
                                 105
Ile Leu Val Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                             120
Leu His Tyr Thr Val Ile Met Ser Trp Arg Val Cys Thr Ile Leu Ala
                         135
                                             140
Ala Val Ser Trp Ile Phe Ser Phe Leu Leu Ala Leu Val His Leu Val
                    150
Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Val Asn His Phe
                                     170
Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr
            180
                                 185
                                                     190
Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Ile Leu Val Gly
                             200
Pro Leu Cys Leu Val Leu Val Ser Tyr Thr Arg Ile Leu Val Ala Ile
                                             220
Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
225
                    230
                                         235
                                                              240
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
                245
                                     250
Met Tyr Met Ala Pro Lys Ser Gln His Pro Glu Leu Gln Gln Lys Ile
            260
                                 265
Leu Ser Leu Phe Tyr Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
        275
                             280
Tyr Ser Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Arg Arg Ser Leu
                        295
                                             300
Leu Lys Glu Arg Ser Met
305
<210> 1782
<211> 313
<212> PRT
<213> Mus musculus
<400> 1782
Met Lys Glu Asn Gln Thr Met Val Thr Glu Phe Ile Leu Leu Gly Phe
                                     10
                                                         15
Cys Leu Gly Pro Arg Ile His Val Ile Leu Phe Ala Leu Phe Ser Val
                                 25
```

<210> 1781

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Cys Tyr Ile Phe Thr Leu Leu Gly Asn Gly Phe Thr Leu Gly Leu Ile
Cys Leu Glu Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn
Leu Ala Thr Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Gln Thr
                    70
Leu Val Asn Leu Leu Asp Glu Thr Lys Pro Ile Ser Phe Ala Gly Cys
Met Met Gln Thr Tyr Leu Phe Leu Thr Phe Gly Ser Thr Glu Cys Val
                                105
Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro
                            120
Leu His Tyr Thr Val Ile Met Asn Trp Arg Val Cys Thr Ile Met Ala
                        135
Ala Val Ser Trp Ile Phe Ser Phe Leu Leu Ala Leu Val His Leu Val
                    150
Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Val Asn His Phe
                165
                                    170
Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr
            180
                                185
                                                    190
Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Ala Leu Val Gly
        195
                            200
Pro Leu Cys Leu Val Leu Val Ser Tyr Thr Arg Ile Leu Val Thr Ile
                        215
Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
                                    250
Met Tyr Ile Ala Pro Lys Ser Gln His Pro Glu Glu Leu Gln Lys Ile
Leu Phe Leu Phe Tyr Ser Phe Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Arg Arg Ser Leu
                        295
Cys Asn Glu Asn His Ser Gln Leu Val
```

<210> 1783

<211> 310

<212> PRT

<213> Mus musculus

<400> 1783

 Met
 Gly
 Asn
 Asn
 Met
 Thr
 Leu
 Ile
 Thr
 Glu
 Phe
 Ile
 Leu
 Gly
 Phe
 Ile
 Leu
 Gly
 Phe
 Ile
 Leu
 Gly
 Phe
 Ala
 Leu
 Phe
 Ser
 Leu
 Leu
 Gly
 Thr
 Ile
 Val
 Gly
 Leu
 Ile
 Val
 Ile
 Ile</th

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115
                            120
                                                125
Leu Arg Tyr Ser Ala Ile Met Ser Trp Arg Val Cys Ser Thr Met Ala
                        135
                                            140
Val Thr Ser Trp Ile Ile Gly Val Leu Leu Ser Leu Ile His Leu Val
                    150
                                        155
Leu Leu Pro Leu Pro Phe Cys Val Ser Gln Lys Val Asn His Phe
                165
                                    170
Phe Cys Glu Ile Thr Ala Ile Leu Lys Leu Ala Cys Ala Asp Thr His
            180
                                185
Leu Asn Glu Thr Met Val Leu Ala Gly Ala Val Ser Val Leu Val Gly
        195
                            200
Pro Phe Ser Ser Ile Val Val Ser Tyr Ala Cys Ile Leu Gly Ala Ile
                        215
Leu Lys Ile Gln Ser Glu Glu Gly Gln Arg Lys Ala Phe Ser Thr Cys
                                        235
                    230
Ser Ser His Leu Cys Val Val Gly Leu Phe Tyr Gly Thr Ala Ile Val
                                    250
Met Tyr Val Gly Pro Arg His Gly Ser Pro Lys Glu Gln Lys Lys Tyr
            260
                                265
Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Ser Asp Val Lys Asn Thr Leu Lys Arg Val Leu
                        295
                                            300
Arg Thr Gln Arg Ala Leu
305
<210> 1784
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<211> 310

<212> PRT

<213> Mus musculus

<400> 1784

Met Met Arg Arg Asn His Thr Val Ile Ser Glu Phe Val Phe Gln Gly 10 Phe Ser Ser Phe Gln Glu Tyr Lys Phe Thr Leu Phe Met Val Phe Leu Thr Leu Tyr Leu Leu Thr Leu Thr Gly Asn Ala Ile Ile Met Ile Ile 35 40 Ile Gly Ile Asp Arg His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 50 55 Met Leu Ser Thr Ser Glu Thr Val Tyr Thr Leu Val Ile Val Pro Arg 70 75 Met Leu Ala Ser Leu Val Gly Ser Ser Gln Ser Ile Ser Leu Ala Gly 90 Cys Ala Thr Gln Met Phe Phe Phe Ile Thr Leu Ala Ile Asn Asn Cys 105 Phe Leu Leu Thr Ala Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Arg Tyr Ser Val Ile Met Asn Lys Arg Val Cys Ala Gln Leu 135 140 Val Trp Gly Ser Cys Asn Ile Gly Leu Leu Val Ala Ile Ile Gln Ile 150 155 Ala Ser Val Phe Arg Ala Pro Phe Cys Asp Arg Glu Val Ala His Tyr 165 170 Phe Cys Asp Ile Arg Pro Val Met Lys Leu Ser Cys Ala Asp Thr Thr 180 185 190 Leu His Asp Ile Val Asn Phe Ile Ile Ser Ser Leu Val Ile Val Val 200 205 195

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Pro Met Gly Leu Val Phe Ile Ser Tyr Ile Leu Ile Ile Ser Thr Ile
                                             220
Leu Lys Ile Ala Ser Ala Glu Gly Arg Lys Lys Ala Phe Ala Thr Cys
                                         235
                                                             240
                    230
Ala Ser His Leu Thr Val Val Ile Ile His Tyr Gly Cys Ala Ser Ile
                                     250
Ala Tyr Leu Lys Pro Lys Ser Glu Asn Thr Arg Asp Gln Asp Gln Leu
Ile Ser Val Thr Tyr Thr Val Phe Thr Pro Leu Leu Asn Pro Val Val
                            280
Tyr Thr Leu Arg Asn Lys Glu Val Lys Asp Ala Ile Tyr Arg Ala Ile
                        295
Gly Lys Lys Pro Leu Ala
<210> 1785
<211> 316
<212> PRT
<213> Mus musculus
<400> 1785
Met Ala Tyr Glu Val Met Asn Gln Thr Ser Ala Thr Thr Phe Ile Leu
Val Gly Phe Ser Glu Tyr Pro Gln Leu Gln Lys Pro Leu Phe Leu Leu
            20
Phe Leu Ala Ile Tyr Ser Val Thr Leu Val Gly Asn Leu Gly Ile Leu
Val Val Ile Lys Val Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe
                        55
Leu Ser His Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Phe Thr
                    70
                                        75
Pro Lys Leu Leu Gln Ile Leu Ile Met Glu Asp Arg Thr Val Ser Phe
Lys Ala Cys Met Val Gln Phe Phe Phe Ile Cys Thr Phe Val Ile Thr
                                105
Glu Met Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
                            120
Cys Asn Pro Leu Leu Tyr Thr Val Val Met Pro Phe Gln Phe Cys Ala
                        135
Leu Leu Val Ala Gly Thr Tyr Met Ile Gly Gly Leu Cys Thr Val Ile
                    150
                                        155
Leu Leu Tyr Thr Leu Leu Gln Leu Ser Tyr Cys Glu Tyr Gly Ile Ile
                165
                                    170
Asn His Phe Gly Cys Glu Tyr Ser Ala Val Ile Ser Val Ser Cys Ser
            180
                                185
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Asp Ser Ser Phe Ser Gln Leu Thr Ser Leu Val Ile Ala Ile Val Ser

Val Thr Ile Ile Lys Met Pro Ser Lys Gly Gly Leu Arg Lys Ala Phe

Ser Thr Cys Thr Ser His Leu Thr Ala Ile Ser Ile Phe His Gly Ile

Ile Leu Leu Tyr Cys Val Pro Asn Ser Asn Ser Ser Gln Leu Phe

Val Lys Val Ala Thr Ala Leu Tyr Thr Ile Met Ile Pro Met Leu Asn 280 Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Arg

265

220

255

270

235

250

200 Glu Ser Ser Ser Val Leu Ile Thr Leu Ala Ser Tyr Val Phe Ile Val

215

230

245

260

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Arg Leu Ile Ser Ser Lys Leu His Ser His Leu Thr
                    310
<210> 1786
<211> 319
<212> PRT
<213> Mus musculus
<400> 1786
Met Gln Lys Pro Lys Phe Leu Gln Ile Met Ser Val Glu Asn Ser Thr
Val Lys Thr Glu Phe Tyr Leu Leu Gly Phe Ser Asp His Pro Glu Leu
                                25
Gln Ser Leu Leu Phe Ala Val Phe Phe Ser Ile Tyr Ser Ile Thr Leu
                            40
Met Gly Asn Ile Gly Met Ile Val Leu Ile Thr Val Ser Pro Asn Leu
                        55
His Ile Pro Met Tyr Phe Phe Leu Cys Met Leu Ser Phe Ile Asp Ala
                    70
                                        75
Cys Tyr Ser Ser Val Ile Ala Pro Lys Leu Leu Val Asp Leu Ile Ser
                                    90
Asp Lys Lys Val Ile Ser Tyr Asn Gly Cys Ala Thr Gln Leu Tyr Phe
            100
                                105
Phe Cys Ser Leu Val Asp Thr Glu Ser Phe Leu Leu Ala Ala Met Ala
        115
                            120
                                                 125
Tyr Asp Arg Tyr Ile Ala Ile Cys Asn Pro Leu Leu Tyr Thr Val Ile
                        135
                                            140
Met Ser Lys Arg Val Cys Ile Gln Leu Ala Phe Gly Ala Phe Leu Gly
                    150
                                        155
Gly Thr Met Ser Ser Ile Ile His Thr Thr Asn Thr Phe Gln Leu Ser
                                    170
                                                         175
                165
Phe Cys Ser Lys Val Ile Asn His Phe Phe Cys Asp Val Ser Pro Leu
            180
                                185
                                                     190
Phe Ser Leu Ser Cys Phe Asp Thr Tyr Thr His Asp Ile Ile Leu Val
        195
                            200
Val Phe Ala Ser Leu Val Glu Ala Leu Ser Leu Leu Thr Val Leu Leu
                        215
                                             220
Ser Tyr Met Tyr Ile Ile Val Ala Ile Cys Lys Ile Gly Ser Ala Glu
                    230
                                        235
Gly Arg Lys Lys Gly Phe Ser Thr Cys Ala Ser His Leu Ala Val Ile
                245
                                    250
Thr Ile Tyr His Gly Thr Leu Ile Phe Ile Tyr Leu Arg Pro Ser Thr
            260
                                                     270
                                265
Gly His Ser Met Asn Ile Asp Lys Met Thr Ser Val Phe Tyr Thr Leu
                            280
                                                285
Ile Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp
                        295
Val Lys Phe Ala Phe Arg Lys Ile Ile Ser Lys Lys Leu Phe Thr
                    310
<210> 1787
<211> 316
<212> PRT
<213> Mus musculus
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<400> 1787

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Met Met Leu Asp Leu Gly Asn Glu Ser Ser Val Thr Met Phe Ile Leu
Ser Gly Phe Ser Glu Tyr Pro His Leu His Ala Pro Leu Phe Leu Leu
Phe Phe Met Ile Tyr Thr Val Thr Leu Ile Gly Asn Leu Gly Ile Ile
Val Val Arg Lys Val Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe
Leu Ser His Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Phe Thr
Pro Lys Leu Glu Ile Leu Ile Val Glu Asp Arg Thr Ile Ser Phe
Lys Gly Cys Met Thr Gln Phe Phe Phe Ile Cys Ala Phe Val Ile Thr
                               105
Glu Met Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
                            120
Cys Asn Pro Leu Leu Tyr Thr Val Ser Met Ser Pro Lys Leu Cys Ala
                        135
Phe Leu Val Ala Gly Thr Tyr Met Trp Gly Val Leu Cys Ser Leu Thr
                    150
                                        155
Ile Thr Tyr Ser Leu Leu Gln Leu Ser Tyr Cys Gly Pro Asn Ile Ile
                                    170
Asn His Phe Gly Cys Glu Tyr Ser Ala Ile Leu Ser Leu Ser Cys Ser
            180
                                185
                                                    190
Asp Pro Thr Phe Ser Gln Val Val Cys Leu Thr Ile Ser Ile Phe Asn
                            200
Glu Thr Cys Ser Leu Leu Ile Ile Leu Ala Ser Tyr Val Phe Ile Val
                        215
                                            220
Val Thr Ile Ile Lys Met Pro Ser Lys Gly Gly Leu Gln Lys Ala Phe
                   230
                                        235
Ser Thr Cys Ser Ser His Leu Thr Ala Ile Ser Ile Phe His Gly Ile
                                    250
Ile Leu Leu Tyr Cys Val Pro Asn Ser Lys Asn Ser Trp Leu Val
                                265
Val Lys Val Ala Thr Val Leu Phe Thr Val Met Ile Pro Met Leu Asn
                            280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Thr Val Ser
                        295
Arg Leu Met His Leu Lys Leu Gln Ala His Ser Thr
305
                    310
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<210> 1788 <211> 310
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<400> 1788

 Met
 Ser
 Val
 Lys
 Thr
 Glu
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 Tyr
 Leu
 Leu
 Gly

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<211> 310 <212> PRT

<213> Mus musculus

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90
Cys Ala Thr Gln Leu Tyr Phe Phe Cys Ser Leu Val Asp Thr Glu Ser
                                105
                                                    110
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Thr Val Ile Met Ser Lys Arg Val Cys Thr His Leu
                        135
                                            140
Ala Phe Gly Ala Phe Leu Gly Gly Thr Met Ser Ser Ile Ile His Thr
                    150
                                        155
Thr Asn Thr Phe Gln Leu Ser Phe Cys Ser Lys Val Ile Asn His Phe
                                    170
Phe Cys Asp Ile Ser Pro Leu Phe Ser Leu Ser Cys Thr Asp Thr Tyr
            180
                                185
                                                    190
Thr His Asp Ile Ile Leu Val Val Phe Ala Ser Leu Val Glu Ala Val
        195
                            200
                                                205
Ser Leu Leu Ala Val Leu Leu Ser Tyr Met Tyr Ile Ile Val Ala Ile
                        215
                                            220
Leu Lys Thr Gly Ser Ala Glu Gly Arg Lys Lys Gly Phe Ser Thr Cys
                    230
                                        235
                                                            240
Ala Ser His Leu Thr Val Val Thr Ile Tyr His Gly Thr Leu Ile Phe
                                    250
Ile Tyr Leu Arg Pro Ser Thr Gly His Ser Met Asp Ile Asp Lys Met
            260
                                265
                                                    270
Thr Ser Val Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Phe Ala Phe Arg Lys Ile Met
                        295
                                            300
Ser Lys Lys Ser Phe Ser
305
<210> 1789
<211> 316
<212> PRT
<213> Mus musculus
<400> 1789
Met Ile Met Glu Phe Thr Ser Gly Asn Tyr Thr Leu Val Thr Glu Phe
1
                                    10
                                                        15
Ile Leu Leu Gly Phe Pro Thr Arg Pro Glu Leu Gln Ile Ile Leu Phe
            20
                                25
Leu Val Phe Leu Thr Leu Tyr Gly Met Ile Leu Ile Gly Asn Ile Gly
                            40
                                                4.5
Leu Met Leu Leu Ile Arg Thr Asp Pro His Leu Gln Thr Pro Met Tyr
                        55
Phe Phe Leu Ser Asn Leu Ser Phe Val Asp Leu Cys Tyr Ser Ser Val
                                                            80
                    70
                                        75
Ile Val Pro Asn Met Leu Val Asn Phe Leu Ser Ala Lys Lys Ser Ile
                                    90
                85
Ser Tyr Leu Gly Cys Ala Leu Gln Phe Tyr Phe Phe Cys Thr Phe Ala
            100
                                105
                                                    110
Asp Thr Glu Ser Phe Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
                                                125
                            120
        115
Ala Ile Cys Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Arg Ser Leu
                        135
                                            140
Cys Ile Trp Leu Ile Val Leu Ser Tyr Val Gly Gly Asn Met Ser Ser
                   150
                                       155
Leu Val His Thr Ser Phe Ala Phe Ile Leu Lys Tyr Cys Asp Lys Asn
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Ile Ile Asn His Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser
Cys Thr Asp Thr Ser Ile Asn Glu Trp Leu Leu Ser Thr Tyr Gly Ser
                                                205
        195
Ser Val Glu Ile Ile Cys Phe Phe Ile Ile Ile Ser Tyr Phe Phe
                        215
Ile Leu Leu Ser Val Leu Lys Ile Arg Ser Thr Ser Gly Arg Lys Lys
                                        235
Thr Phe Ser Thr Cys Ala Ser His Leu Thr Ser Val Ala Ile Tyr Gln
                                    250
Gly Thr Leu Leu Phe Ile Tyr Ser Arg Pro Ser Ser Leu Tyr Ser Pro
                                265
Asn Thr Asp Lys Ile Ile Ser Val Phe Tyr Thr Ile Ile Ile Pro Val
                            280
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala
                        295
                                            300
Ala Lys Lys Ala Leu Arg Ser Lys Ile Gln Ser Pro
                    310
```

<210> 1790

<211> 313

<212> PRT

<213> Mus musculus

<400> 1790

Met Ser Val Glu Asn Ser Thr Val Lys Thr Glu Phe Tyr Leu Leu Gly Phe Ser Asp His Pro Glu Leu Gln Ser Leu Leu Phe Ala Val Phe Phe Ser Ile Tyr Ser Ile Thr Leu Met Gly Asn Ile Gly Met Ile Val Leu 35 Ile Thr Val Ser Pro Asn Leu His Ile Pro Met Tyr Phe Phe Leu Trp Met Leu Ser Phe Ile Asp Ala Cys Ser Ser Ser Val Ile Ala Pro Lys 70 75 Leu Leu Val Asp Leu Ile Ser Asp Lys Lys Val Ile Ser Tyr Asn Gly 90 Cys Ala Thr Gln Phe Tyr Phe Cys Cys Ser Leu Val Asp Thr Glu Ser 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Asn 120 Pro Leu Leu Tyr Thr Val Ile Met Ser Lys Arg Val Cys Thr Gln Leu 135 140 Ala Phe Glu Ala Phe Leu Gly Gly Thr Met Ser Ser Ile Ile His Thr Thr Asn Thr Phe Gln Leu Ser Phe Cys Ser Lys Glu Ile Asn His Phe 170 Phe Cys Asp Met Thr Pro Leu Phe Ser Leu Ser Cys Phe Asp Thr Tyr 180 185 190 Thr His Asp Ile Ile Leu Val Val Phe Ala Ser Leu Val Glu Ala Val 195 200 205 Cys Leu Leu Ala Val Leu Leu Ser Tyr Met Tyr Ile Ile Val Ala Ile 215 220 Leu Lys Thr Gly Ser Ala Glu Gly Arg Lys Lys Gly Phe Ser Thr Cys 235 230 Ala Ser His Leu Ala Val Ile Thr Ile Tyr His Gly Thr Leu Ile Phe 245 250 Ile Tyr Leu Arg Pro Ser Thr Gly His Ser Met Asp Ile Asp Lys Met

260 265 Thr Ser Val Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Leu Ile 280 Tyr Ser Leu Arg Asn Lys Asp Val Lys Phe Ala Phe Arg Lys Ile Ile 295 300 Ser Lys Lys Leu Phe Phe Leu Val Ile 310 <210> 1791 <211> 316 <212> PRT <213> Mus musculus <400> 1791 Met Val Pro Leu Glu Ile Asn Val Ser Val Glu Ile Asn Phe Val Leu Leu Gly Phe Thr Asp Tyr Pro Asn Leu Gln Ile Pro Leu Phe Leu Ile 25 Phe Leu Phe Met Tyr Ile Ile Thr Val Val Gly Asn Leu Gly Met Thr 40 Val Leu Ile Asn Ile Asp His Lys Phe His Thr Pro Met Tyr Phe Phe 55 Leu Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Thr Ile Ile Thr 70 75 Pro Lys Leu Leu Glu Asn Leu Val Leu Ala Asp Lys Thr Ile Leu Tyr Phe Ser Cys Met Leu Gln Tyr Phe Leu Ser Cys Val Ala Leu Val Ser 105 110 100 Glu Ser Tyr Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile 115 120 125 Cys Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Pro Arg Leu Cys Ile 135 140 Leu Leu Val Thr Gly Ser Tyr Ile Trp Ser Thr Phe Glu Thr Leu Ile 150 155 Leu Leu Cys Tyr Ala Leu Gln Leu Lys Phe Ser Arg Phe Asn Val Ile 170 165 175 Asn His Phe Phe Cys Glu Tyr Thr Ala Leu Ile Val Val Ser Ser Ser 180 185 190 Asp Ile His Ile Pro Ser Leu Leu Phe Cys Phe Ala Thr Phe Asn 195 200 205 Glu Val Ser Thr Leu Leu Ile Ile Leu Thr Ser Tyr Val Leu Ile Phe 215 220 Val Thr Val Leu Lys Ile Lys Ser Ala Ser Gly Arg Arg Lys Ala Phe 230 235 Ser Thr Cys Ala Ser His Leu Thr Ala Ile Thr Ile Phe His Gly Thr 250 245 Ile Leu Ser Leu Tyr Cys Val Pro Asn Ser Lys Asn Ser Arg Asn Ala 265 Val Lys Val Ala Ser Val Phe Tyr Ala Val Val Asn Pro Leu Leu Asn 280 285 Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Val Phe Gln 295 Lys Leu Val Ser Thr Ser Leu Lys Phe Gln Leu His 310

```
Leu Ser His Leu Ser Phe Ala Asp Phe Cys Tyr Ser Ser Ile Ile Ala
                    70
                                        75
Pro Lys Met Leu Val Asn Leu Val Val Glu Asp Arg Thr Ile Ser Phe
                                    90
Leu Gly Cys Ile Met Gln Phe Phe Phe Phe Cys Thr Phe Val Val Thr
            100
                                105
                                                    110
Glu Leu Ile Leu Phe Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
                            120
Cys Asn Pro Leu Leu Tyr Thr Val Val Met Ser Gln Arg Leu Cys Ala
                        135
Leu Leu Val Leu Gly Ser Tyr Ala Trp Gly Val Val Cys Ser Leu Thr
                    150
                                        155
Leu Thr Cys Ser Ala Leu Asn Leu Tyr Phe Arg Gly Phe Asn Thr Ile
                                    170
                165
Asn His Phe Phe Cys Glu Leu Ser Ser Leu Ile Ala Leu Ser Cys Ser
                                                    190
Asp Ser His Leu Thr Gln Leu Leu Phe Ile Val Ala Thr Phe Asn
        195
                            200
Glu Ile Ser Thr Leu Leu Ile Ile Leu Thr Ser Tyr Leu Phe Ile Val
                        215
                                            220
Val Thr Ala Leu Lys Met His Ser Ser Ser Gly His Arg Lys Val Phe
                    230
                                        235
Ser Thr Cys Ala Ser His Met Thr Ala Ile Thr Ile Phe His Gly Thr
                245
                                    250
Ile Leu Phe Leu Tyr Cys Val Pro Asn Ser Lys Asn Ser Arg His Thr
                                265
Val Lys Val Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn
                            280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Ser
                        295 .
Lys Leu Met Asn Val Arg Lys Phe Ser Gln
                    310
<210> 1794
<211> 311
<212> PRT
<213> Mus musculus
<400> 1794
Met Asp Glu Gly Asn Cys Ser Ser Ile Thr Glu Phe Ile Leu Leu Gly
Ile Thr Asp Asp Pro Ser Met Lys Val Val Leu Phe Ile Ser Phe Leu
Ile Ile Tyr Leu Ile Ile Leu Val Ala Asn Ile Gly Ile Ile Val Leu
        35
Ile Arg Ile Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Phe Ser Asp Leu Cys Tyr Ser Thr Ala Val Gly Pro Lys
                    70
Met Leu Val Asp Leu Leu Ala Lys His Lys Ser Leu Ser Phe Leu Gly
                                    90
Cys Ala Leu Gln Phe Phe Thr Cys Val Phe Ile Asp Val Glu Cys
                                105
                                                    110
Val Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Asn
                            120
```

Pro Leu Met Tyr Val Val Asp Met Ser Ser Arg Phe Cys Tyr Gln Leu

140

```
Leu Ala Gly Val Tyr Val Leu Ala Met Ile Asp Thr Leu Met Gln Thr
                    150
                                        155
Ile Ile Thr Phe Gly Leu Cys Phe Cys Arg Ser Asn Glu Ile Asn His
                165
                                    170
Phe Phe Cys Asp Leu Pro Pro Ile Leu Leu Ser Cys Ser Asp Ile
            180
                                185
Tyr Val Asn Glu Leu Ala Leu Phe Val Phe Ser Gly Phe Val Glu Leu
                            200
Cys Thr Ile Ser Gly Leu Leu Val Ser Tyr Ser Tyr Ile Ile Ala Ser
                        215
                                            220
Val Leu Lys Ile Ser Ser Asp Glu Gly Arg Phe Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu
                245
                                    250
Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys
            260
                                265
Thr Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Tyr Lys Leu
   290
                        295
Arg Asn Lys Arg Ser Phe Lys
305
```

<210> 1795

<211> 326

<212> PRT

<213> Mus musculus

<400> 1795

Met Asn Ser Val Val Ser Ser Asn Arg Ser Gln Val Trp Asn Glu Gly Asn Arg Ser Met Val Ala Ser Phe Ile Leu Leu Ala Phe Ser Glu Phe 25 Pro Asn Leu Gln Leu Pro Leu Phe Leu Val Phe Leu Ile Met Tyr Met 40 Val Thr Val Leu Glu Asn Leu Gly Met Ile Phe Ile Ile Arq Met Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ser Phe Val Asp Phe Cys Tyr Thr Ser Val Ile Ala Pro Lys Leu Leu Asp Leu 85 Leu Ile Val Glu Asp Lys Ser Ile Ser Phe Glu Gly Cys Met Ala Gln 105 Tyr Phe Leu Gly Cys Thr Phe Val Ile Ile Glu Met Phe Met Leu Ala 120 Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Asn Pro Leu Leu Tyr 135 Thr Val Ala Met Ser His Glu Leu Cys Ser Leu Leu Val Val Ile Thr 150 155 Tyr Ile Trp Ala Gly Ile Phe Ser Ser Thr Leu Thr Tyr Ile Leu Leu 170 Gln Leu Ser Tyr Cys Gly Pro Asn Val Ile Asp His Phe Cys Cys Glu 180 185 190 Tyr Ser Ala Leu Leu Ser Val Ser Cys Ser Asp Thr Ser Phe Ser Gln 195 200 Met Ala Cys Leu Val Ile Ser Met Phe Asn Glu Ala Cys Cys Leu Leu 215 Ile Ile Ile Thr Ser Tyr Val Phe Ile Val Val Thr Val Ile Lys Ile

```
230
                                        235
Pro Thr Lys Gly Ala Phe Arg Lys Ala Phe Ser Thr Cys Ala Ser His
                245
                                    250
Leu Thr Ala Ile Gly Val Cys His Gly Ile Val Leu Leu Tyr Cys
                                265
Val Leu Lys Ser Lys Ser Ser Leu Phe Leu Val Lys Val Ala Thr Val
                            280
Phe His Ser Met Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                        295
Arg Asn Lys Asp Val Lys Glu Thr Val Arg Lys Leu Ile Tyr Leu Lys
                    310
                                        315
Cys Ile Phe His Ser Ile
                325
<210> 1796
<211> 318
<212> PRT
<213> Mus musculus
<400> 1796
Met Gln Phe Ile Lys Gln Arg Arg Met Glu Val Gly Asn Cys Ser Ala
                                    10
Thr Glu Phe Leu Leu Gly Ile Thr Asn Asn Pro Val Ile Lys Val
Ile Leu Phe Thr Thr Phe Leu Ile Val Tyr Leu Ile Ile Leu Ile Glu
                            40
Asn Leu Gly Met Ile Ile Leu Ile Arg Met Asn Ser Gln Leu His Thr
Pro Met Tyr Phe Phe Leu Ser His Leu Ser Phe Ser Asp Ile Cys Tyr
Ser Thr Ala Val Gly Pro Lys Met Leu Val Gly Leu Ile Phe Lys Asn
                                    90
Asn Ser Ile Pro Phe Ile Asp Cys Ala Val Gln Phe Phe Ile Phe Cys
                                105
Ile Phe Thr Asp Ala Glu Cys Val Leu Leu Ala Val Met Ala Phe Asp
                            120
                                                125
Arg Tyr Lys Ala Ile Ser Asn Pro Leu Met Tyr Ala Val Asp Met Ser
    130
                        135
Arg Val Val Cys Tyr Gln Leu Leu Ala Val Val Tyr Leu Val Gly Met
                    150
Val Asp Ala Leu Thr His Thr Thr Leu Thr Phe His Leu Cys Phe Cys
                                    170
Gln Ser Lys Glu Ile Asn His Phe Phe Cys Asp Val Pro Pro Leu Leu
Leu Leu Ser Cys Ser Asp Thr Glu Val Asn Glu Leu Val Ile Phe Thr
                            200
Leu Phe Gly Phe Ile Glu Leu Ser Thr Ile Ser Gly Val Leu Val Ser
                        215
                                            220
Tyr Cys Tyr Ile Ile Ser Ser Val Leu Lys Ile Arg Ser Ala Glu Gly
                    230
                                        235
Arg Phe Lys Ala Phe Ser Thr Cys Thr Ser His Leu Thr Val Val Ala
                245
                                    250
Ile Phe Gln Gly Thr Met Leu Phe Met Tyr Phe Arg Pro Ser Ser Ala
            260
                                265
                                                    270
Tyr Ser Leu Asp Gln Asp Lys Met Thr Ser Leu Phe Tyr Thr Leu Val
                            280
                                                285
```

Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val

300

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Lys Ala Ser Val Lys Arg Ser Leu Gln Ser Arg Ile Ser Phe
<210> 1797
<211> 311
<212> PRT
<213> Mus musculus
<400> 1797
Met Asp Lys Gly Asn Cys Ser Thr Leu Thr Glu Phe Leu Leu Gly
                                    10
Ile Thr Ser Asn Pro Glu Val Lys Val Phe Leu Phe Thr Met Phe Leu
            20
                                25
Val Val Tyr Leu Thr Asn Leu Leu Thr Asn Leu Gly Met Ile Ile Leu
                            40
                                                4.5
Ile Arg Met Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
His Leu Ser Phe Ser Asp Leu Cys Tyr Ser Thr Ala Val Gly Pro Lys
                    70
                                        7.5
Met Leu Val Asp Leu Leu Ser Lys Asn Thr Ser Ile Pro Phe Leu Gly
                8.5
                                    90
Cys Ala Met Gln Phe Phe Thr Phe Cys Ile Phe Ile Asp Ala Glu Cys
            100
                                105
                                                    110
Val Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Asn
                            120
                                                125
Pro Leu Leu Tyr Ala Val Asp Met Ser Arg Lys Val Cys Phe Gln Leu
                        135
                                            140
Leu Thr Gly Val Tyr Ser Val Ala Leu Ala Asp Ala Leu Ile His Thr
                    150
                                        155
Thr Leu Thr Phe His Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His
                165
                                    170
                                                        175
Phe Phe Cys Asp Ile Pro Pro Val Leu Val Leu Ser Cys Ser Asp Thr
            180
                                185
                                                    190
Gln Val Asn Val Leu Val Ile Phe Thr Val Phe Gly Phe Ile Glu Leu
                            200
                                               205
Ser Thr Ile Ser Gly Val Leu Ile Ser Tyr Cys Tyr Ile Ile Ser Ser
                                           220
                        215
Val Leu Lys Ile Ser Ser Ala Ala Gly Arg Leu Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Met Leu
                245
                                    250
Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys
            260
                                265
Val Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Gln Arg Ile
                        295
Arg Ser Lys Met Cys Leu Lys
<210> 1798
<211> 308
<212> PRT
<213> Mus musculus
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Met Asp Arg Gly Asn Cys Ser Ser Val Asp Glu Phe Ile Phe Leu Gly

<400> 1798

```
Ile Thr Asn Asn Pro Val Lys Lys Val Ala Leu Phe Thr Thr Phe Leu
                                25
Val Val Tyr Leu Ile Thr Leu Leu Ala Asn Leu Gly Ile Ile Ile Leu
        35
                            40
Ile Arg Met Asn Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Phe Cys Asp Phe Cys Tyr Ser Thr Ala Ile Gly Pro Lys
                    70
Met Leu Val Asp Leu Leu Ala Ala Glu Lys Ser Ile Pro Phe Phe Gly
                                    90
Cys Ala Val Gln Phe Leu Ile Phe Cys Val Phe Ala Asp Ser Glu Cys
            100
                                105
                                                    110
Leu Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Gln Ala Ile Ser Asn
                            120
Pro Leu Leu Tyr Thr Val Asn Met Ser Ser Met Val Cys Phe Met Leu
                        135
                                            140
Met Thr Gly Val Tyr Leu Val Ala Thr Thr Asp Gly Leu Ile His Thr
                    150
                                        155
Ile Leu Ala Phe Arg Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His
               165
                                    170
Phe Phe Cys Asp Leu Pro Pro Leu Tyr Leu Leu Ser Cys Ser Glu Ile
           180
                                185
                                                    190
Gln Val Asn Glu Leu Ala Leu Phe Thr Val Phe Gly Phe Ile Glu Leu
       195
                            200
                                                205
Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Leu Ser
                        215
                                            220
Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Thr Val Ala Ile Phe Gln Gly Thr Met Leu
               245
                                    250
Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys
            260
                                265
Met Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Gln Arg Leu
                        295
Lys Met Lys Met
305
<210> 1799
<211> 311
<212> PRT
<213> Mus musculus
<400> 1799
Met Asp Lys Glu Asn Cys Ser Ser Leu Pro Glu Leu Leu Leu Glu
                5
                                    10
Ile Thr Asn Asn Pro Asp Met Lys Val Leu Ile Leu Thr Val Phe Leu
                                25
Ala Ile Asn Leu Ile Val Leu Ile Ile Asn Ile Gly Met Ile Ile Phe
                            40
Ile Lys Met Asn Pro Gln Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
His Leu Phe Phe Ser Asp Leu Ser Tyr Ser Ser Ala Ile Gly Ser Lys
                    70
                                        75
Met Leu Ile Asp Ile Phe Ser Lys Tyr Lys Thr Ile Pro Leu Leu Phe
                                    90
```

```
Val Pro Phe Asp Ser Phe Phe Val Cys Ile Phe Ile Asp Val Glu Cys
            100
                                                    110
Val Leu Pro Ala Val Met Ala Phe Asp Gln Tyr Lys Ala Ile Ser His
Pro Val Ile Tyr Ala Ile Asp Met Ser Asn Arg Val Cys Tyr Gln Phe
                        135
                                            140
Leu Ala Gly Val Tyr Leu Val Gly Met Thr Asp Ala Leu Ile His Arg
                                        155
Thr Leu Thr Phe Cys Leu Cys Phe Cys Glu Ser His Glu Ile Asn His
                165
                                    170
Phe Phe Cys Asp Ile Pro Pro Ile Leu Leu Ser Cys Leu Asn Thr
            180
                                185
Gln Phe Asn Glu Leu Met Ile Phe Thr Ile Phe Gly Phe Ile Gln Leu
                            200
                                                205
Ser Thr Ile Ser Glu Val Leu Val Ser Tyr Cys Ser Ile Ile Leu Ser
                        215
                                            220
Val Leu Lys Ile His Ser Ala Lys Gly Arg Phe Lys Ala Phe Ser Thr
                    230
Cys Thr Leu His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu
                245
                                    250
Phe Thr Tyr Phe Gln Pro Ser Thr Ser Tyr Ser Leu Asp Gln Asp Lys
                                265
                                                    270
Met Thr Ser Leu Phe Tyr Thr Leu Met Ile Pro Met Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Tyr Lys Asp Val Lys Glu Thr Leu Gln Asn Leu
    290
                        295
                                            300
Glu Asn Lys Arg Trp Cys Lys
                    310
<210> 1800
<211> 315
<212> PRT
<213> Mus musculus
<400> 1800
```

Met Ile Gln Asn Ile Ser Glu Leu Ser Glu Phe Ile Leu Val Gly Leu Thr Asp Ala Pro Phe Leu Gln Ile Pro Leu Phe Ile Ile Phe Thr Leu Ile Tyr Leu Thr Thr Leu Phe Gly Asn Leu Gly Met Ile Leu Leu Ile 40 Leu Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn 55 Leu Ser Leu Val Asp Cys Val Tyr Ala Ser Ala Val Thr Pro Lys Val 70 75 Met Glu Gly Phe Leu Thr Gly Asn Lys Ile Ile Ser Tyr Asn Ala Cys 90 Ala Ala Gln Met Phe Phe Phe Ala Ala Phe Ala Thr Val Glu Ser Phe 100 105 Met Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Lys Pro 120 125 Leu His Tyr Ser Thr Thr Met Thr Thr Thr Ile Cys Val Leu Leu Leu 135 140 Ala Gly Ser Tyr Val Ser Gly Leu Leu Gln Ser Ser Ile His Val Ser 150 155 Phe Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Asn His Phe 170 Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Ser Ile His

```
180
                                185
Thr Asn Glu Ile Ile Leu Phe Met Leu Ala Ala Phe Asn Val Ala Phe
        195
                            200
                                                 205
Thr Leu Leu Val Ile Leu Ser Ser Tyr Leu Leu Ile Phe Val Ala Ile
                        215
Leu Arg Met Arg Ser Ala Glu Ser Arg Lys Lys Ala Ile Ser Thr Cys
                    230
                                         235
Ala Ser His Leu Thr Thr Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe
                245
                                    250
Met Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp Lys Met
                                                     270
                                265
Ala Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Lys Lys Val Ala
                        295
Gly Lys Ala Val Leu Ser Leu Gly Leu Val Asn
                    310
<210> 1801
<211> 313
<212> PRT
<213> Mus musculus
<400> 1801
Met His Asn Ile Ser Glu Val Thr Glu Phe Ile Leu Val Gly Leu Thr
                                     10
Asp Ala Pro Gly Leu Gln Val Pro Leu Phe Ile Ile Phe Thr Phe Ile
Tyr Leu Thr Thr Leu Phe Gly Asn Leu Gly Met Ile Val Leu Ile Leu
Leu Asp Ser Ser Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu
Ser Leu Val Asp Cys Val Tyr Ala Ser Ala Val Thr Pro Lys Val Ile
                    70
Glu Gly Phe Leu Thr Glu Lys Lys Ile Ile Ser Tyr Asn Ala Cys Ala
                                    90
Thr Gln Met Phe Phe Leu Ile Gly Phe Ala Ile Ile Glu Gly Phe Leu
                                105
                                                     110
Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Lys Pro Leu
                            120
                                                 125
Tyr Tyr Ser Thr Ser Met Thr Thr Thr Ile Cys Thr Leu Leu Ile Val
                                             140
Gly Ser Tyr Ile Ser Gly Leu Leu Gln Ser Ser Ile His Val Ala Phe
                    150
                                        155
Thr Phe His Leu Ser Phe Cys His Ser Asn Val Val Asn His Phe Phe
                                    170
```

Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Ser Val Tyr Ile

Asn Glu Ile Val Leu Phe Ile Leu Ala Ala Leu Asn Ile Ala Leu Thr
195
200
205
Ile Leu Val Ile Val Asn Ser Tyr Val Leu Ile Phe Val Ala Ile Leu

Arg Met Arg Ser Thr Asp Gly Gln Lys Lys Ala Ile Ser Thr Cys Ala

Ser His Leu Thr Thr Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe Met

Tyr Leu Gln Pro Ser Ser Thr His Ser Met Asp Thr Asp Lys Val Ala

265

215

230

245

185

190

270

220

235

250

180

Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro Leu Val Tyr 280 Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Lys Lys Val Thr Arg 295 Lys Val Leu Phe Ser Leu Gly Leu Val 310 <210> 1802 <211> 315 <212> PRT <213> Mus musculus <400> 1802 Met Ala Asp Asn Gly Thr Arg Leu Thr Glu Phe Ile Leu Met Gly Phe Gln Leu Gln Ala Glu Leu Gln Leu Gly Leu Phe Phe Thr Phe Leu Thr Phe Tyr Leu Ile Thr Ile Ala Gly Asn Leu Gly Met Ile Met Leu Ile 40 Gln Ser Asp Pro Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser His 55 Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Ile Val Pro Gln Leu 75 Leu Glu Ile Leu Gly Asn Asn Lys Met Val Ile Thr Tyr Glu His Cys Ala Thr Gln Phe Phe Phe Thr Phe Tyr Ala Ser Thr Glu Cys Phe 100 105 110 Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asn Pro 120 125 Leu Leu Tyr Ala Met Ala Met Thr Pro Gln Thr Arg Leu Gly Leu Val 135 . 140 Ala Ala Ala Tyr Ser Gly Ala Met Val Asn Thr Val Val Arg Thr Gly 150 155 Cys Thr Phe Ser Ile Ser Phe Cys Lys Ser Asn Gln Val Asp Phe Leu 170 175 Phe Cys Asp Leu Pro Pro Leu Met Lys Leu Ala Cys Ser Glu Thr Lys 185 190 Leu Gln Glu Gln Val Ile Phe Leu Phe Ala Phe Leu Val Ile Ile Thr 200 Ser Val Ser Val Ile Leu Val Ser Tyr Leu Phe Ile Ile Trp Ala Ile 215 220 Leu Lys Ile Arg Thr Ala Gly Ala Lys Ala Lys Thr Phe Ser Thr Cys 235 Ala Ser His Met Ile Ala Val Ala Leu Phe Phe Gly Thr Ile Ile Phe 250 Met Tyr Leu Lys Gly Asn Met Gly Lys Ser Leu Trp Glu Asp Lys Ile 265 270 Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Met Ile 280 285 Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Leu Lys Lys Ala Phe 295 Lys Arg Ile Lys Ser Ser Gln Glu Ser Lys Thr 310

<210> 1803 <211> 315

<212> PRT

<213> Mus musculus

50

```
<400> 1803
Met Ala Asp Asn Gly Thr Arg Leu Thr Glu Phe Ile Leu Ile Gly Phe
Gln Leu Gln Ala Glu Leu Gln Leu Cys Leu Phe Phe Ile Phe Leu Ala
Phe Tyr Leu Ile Thr Ile Val Gly Asn Leu Gly Met Ile Met Leu Ile
Gln Ser Asp Pro Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser His
Leu Ser Phe Leu Asp Val Cys Tyr Ser Ser Val Ile Val Pro Gln Leu
                                         75
Leu Glu Thr Leu Gly Ser Asn Lys Met Val Ile Thr Tyr Glu Arg Cys
                85
Ala Thr Gln Phe Phe Phe Thr Leu Tyr Ala Ser Thr Glu Cys Phe
            100
                                105
Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asn Pro
                            120
Leu Leu Tyr Ala Met Ala Met Thr Pro Gln Thr Arg Leu Gly Leu Val
                        135
                                            140
Ala Ala Tyr Ser Gly Ala Met Val Asn Thr Val Val Arg Thr Gly
                    150
                                        155
Cys Thr Phe Ser Ile Ser Phe Cys Lys Ser Asn Gln Val Asp Phe Phe
                165
                                    170
Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser Cys Ser Glu Thr Lys
                                185
                                                    190
Leu Arg Glu Gln Val Ile Phe Leu Phe Ala Phe Leu Val Ile Thr Thr
        195
                            200
Ser Val Ser Val Ile Leu Val Ser Tyr Leu Phe Ile Ile Trp Ala Ile
                        215
                                             220
Leu Lys Ile Arg Thr Ala Gly Ala Lys Ala Lys Thr Phe Ser Thr Cys
                    230
                                        235
Ala Ser His Met Ile Ala Val Ala Leu Phe Phe Gly Thr Leu Ile Phe
                                    250
Met Tyr Leu Lys Gly Asn Met Gly Lys Ser Leu Trp Gln Asp Lys Ile
                                265
Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Met Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Leu Lys Lys Ala Phe
                        295
Lys Arg Ile Lys Ala Ser Gln Glu Ser Lys Thr
<210> 1804
<211> 321
<212> PRT
<213> Mus musculus
<400> 1804
Met Thr Val Lys Asn Ile Thr Thr Met Ser Gly Phe Leu Leu Met Gly
Phe Ser Asp Asn Arg Glu Leu Gln Ile Leu Tyr Ala Leu Leu Phe Leu
Leu Thr Tyr Leu Leu Gly Ser Ala Gly Asn Phe Ile Ile Ile Thr Ile
        35
                            40
Thr Thr Leu Asp Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys
```

55

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His Leu Ser Ile Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln
Tyr Val Asp Ser Ser Leu Ala Gly Ser Gly Tyr Ile Ser Tyr Gly Gln
               85
                                    90
Cys Met Leu Gln Ile Phe Phe Phe Ala Ala Phe Ala Trp Gly Glu Val
                                105
           100
Ala Ile Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu
        115
                            120
                                                125
Pro Leu His Tyr Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala
                        135
                                            140
Val Thr Ser Val Trp Leu Ser Ser Val Ile Pro Gly Thr Leu Tyr Ile
                    150
                                       155
Ala Ser Ile Phe Ser Ile Arg Phe Cys Arg Ala Lys Ile Ile His Gln
                165
                                    170
Leu Phe Cys Asp Val Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp
            180
                                185
His Leu Val Val Ile Gly Met Val Ser Phe Met Thr Ala Val Ala Phe
                            200
        195
Ala Cys Phe Val Gly Ile Val Ile Ser Tyr Val His Ile Phe Ser Thr
                        215
                                            220
Val Leu Arg Met Pro Ser Ala Glu Ser Arg Ser Lys Val Phe Ser Thr
                    230
                                        235
Cys Leu Pro His Leu Phe Val Val Ser Leu Phe Leu Ser Thr Gly Ser
                                    250
               245
Cys Ala Tyr Leu Asn Thr Ser Ser Asp Ser Pro Thr Ala Leu Glu Phe
                                265
            260
Leu Phe Ser Ile Phe Tyr Thr Val Leu Pro Pro Thr Leu Asn Pro Val
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Glu Thr Ile Lys Ser Val Val Arg Lys Leu
                       295
                                            300
Leu Leu Ser Ser Lys Phe Thr Val Arg Ile Ile Cys Pro Val Ala Thr
305
Asp
```

```
<210> 1805
```

<400> 1805

Met Ile Ser Tyr Ser Phe Phe Gln Glu Met Ser Val Asn Cys Ser Leu Trp Gln Glu Asn Lys Leu Ser Val Lys His Phe Ala Phe Ala Lys Phe 25 Ser Glu Val Pro Glu Glu Cys Phe Leu Leu Phe Thr Leu Ile Leu Leu Met Phe Leu Val Ser Leu Thr Gly Asn Ala Leu Ile Thr Leu Ala Ile 55 Cys Thr Ser Pro Ala Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn 75 70 Leu Ser Leu Leu Glu Ile Gly Tyr Thr Cys Ser Val Ile Pro Lys Met 90 Leu Lys Asn Leu Val Thr Glu Ala Arg Gly Ile Ser Arg Glu Gly Cys 100 105 Ala Thr Gln Met Phe Phe Ile Phe Phe Gly Ile Thr Glu Cys Cys 120 Leu Leu Ala Ala Met Ala Phe Asp Arg Tyr Met Ala Ile Cys Ser Pro

<211> 330

<212> PRT

<213> Mus musculus

```
135
Leu His Tyr Ala Thr Arg Met Ser Arg Glu Val Cys Ala His Leu Ala
                   150
Ile Val Ser Trp Gly Met Gly Cys Ile Val Gly Leu Gly Gln Thr Asn
              165
                                   170
Phe Ile Phe Ser Leu Asn Phe Cys Gly Pro Cys Glu Ile Asp His Phe
                                185
                                                    190
           180
Phe Cys Asp Leu Pro Pro Val Leu Ala Leu Ala Cys Gly Asp Thr Ser
       195
                            200
Gln Asn Glu Ala Ala Ile Phe Val Thr Val Val Leu Cys Ile Ser Ser
                       215
                                            220
Pro Phe Leu Leu Ile Ile Tyr Ser Tyr Val Arg Ile Leu Phe Ala Val
                   230
                                        235
Leu Val Met Pro Ser Pro Glu Gly Arg His Lys Ala Leu Ser Thr Cys
                                    250
               245
Ser Ser His Leu Leu Val Val Thr Leu Phe Tyr Gly Ser Ala Ser Ile
                                265
           260
Thr Tyr Leu Arg Pro Lys Ser Ser His Ser Pro Gly Ile Asp Lys Leu
                            280
Leu Ala Leu Phe Tyr Thr Ala Val Thr Ser Met Leu Asn Pro Ile Ile
                                           300
                       295
Tyr Ser Leu Arg Asn Lys Glu Val Lys Ala Ala Leu Arg Arg Thr Leu
               310
                                        315
Ser Leu Lys Lys Pro Leu Ala Ile Asn Arg
               325
```

<210> 1806

<211> 309

<212> PRT

<213> Mus musculus

<400> 1806

Met Ile Asn Ser Ser Val Ser Ser Asp Phe Ile Leu Val Gly Phe Ser Asp Gln Pro Gln Leu Glu Arg Arg Leu Phe Ile Val Val Leu Ile Ser Tyr Leu Leu Thr Leu Val Gly Asn Thr Ile Ile Ile Leu Ile Ser Ser Ile Asp Ser Lys Leu Lys Thr Pro Met Tyr Phe Phe Leu Thr His Leu Ser Phe Val Asp Ile Cys Phe Thr Thr Ser Ile Val Pro Gln Leu Leu Trp Asn Leu Lys Gly Pro Ala Lys Thr Ile Thr Ala Val Gly Cys Ala Val Gln Leu Tyr Val Ser Leu Thr Leu Gly Ser Thr Glu Cys Ile Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu His Tyr Val Ala Val Met Asn Pro Gln Leu Cys Arg Ala Leu Ala Gly Ile Ser Trp Leu Ser Gly Ile Gly Asn Ala Leu Ile Gln Gly Thr Ile Thr Leu Trp Leu Pro Arg Cys Gly His Leu Trp Leu His His Phe Phe Cys Glu Val Pro Ser Met Ile Lys Leu Ala Cys Val Asp Ile His Ala Asn Glu Val Gln Leu Phe Val Ala Ser Leu Val Leu Leu Leu Pro

```
      Leu Ala Leu Ile Leu Thr Ser Tyr Gly His Ile Ala Lys Ala Val Ile 210

      Arg Ile Lys Ser Ser Gln Ala Trp Arg Arg Ala Leu Gly Thr Cys Gly 230

      Ser His Leu Met Val Val Ser Leu Phe Tyr Gly Ser Ile Thr Ala Ile 255

      Tyr Ile Gln Pro Asn Ser Ser Tyr Ala His Thr His Gly Lys Phe Ile 260

      Ser Leu Phe Tyr Thr Val Met Thr Pro Thr Leu Asn Pro Leu Ile Tyr 275

      Thr Leu Arg Asn Lys Glu Val 295

      Arg Ala Ser Gly Val 305
```

<210> 1807 <211> 321 <212> PRT

<213> Mus musculus

<400> 1807 Met Ser Ile Asn Cys Ser Leu Trp Gln Glu Asn Ser Leu Ser Val Lys 10 Arg Phe Ala Phe Ser Lys Phe Ser Glu Val Pro Gly Glu Cys Phe Leu 25 Leu Phe Thr Leu Ile Leu Leu Met Phe Leu Val Ser Leu Thr Gly Asn 40 Glu Leu Ile Ala Ile Ala Ile Cys Thr Ser Pro Ala Leu His Thr Pro 55 Met Tyr Phe Phe Leu Ala Asn Leu Ser Leu Leu Glu Ile Gly Tyr Thr 75 Cys Ser Val Ile Pro Lys Met Leu Gln Ser Leu Val Ser Glu Ala Arg 90 Glu Ile Ser Arg Glu Gly Cys Ala Thr Gln Met Phe Phe Thr Phe 100 105 110 Phe Gly Ile Thr Glu Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg 120 125 Cys Met Ala Ile Cys Ser Pro Leu His Tyr Ala Thr Arg Met Ser His 135 140 Gly Val Cys Ala His Leu Ala Ile Val Ser Trp Gly Met Gly Cys Ile 150 155 Val Gly Leu Gly Gln Thr Asn Phe Ile Phe Ser Leu Asn Phe Cys Gly 165 170 175 Pro Cys Glu Ile Asp His Phe Phe Cys Asp Leu Pro Pro Val Leu Ala 180 185 190 Leu Ala Cys Gly Asp Thr Ser Gln Asn Glu Ala Ala Ile Phe Val Ala 195 200 205 Ala Ile Leu Cys Ile Ser Ser Pro Phe Leu Leu Ile Ile Tyr Ser Tyr 215 220 Val Arg Ile Leu Val Ala Val Leu Val Met Pro Ser Pro Glu Gly Arg 230 235 His Lys Ala Leu Ser Thr Cys Ser Ser His Leu Leu Val Val Thr Leu 250 245 Phe Phe Gly Ser Gly Ser Ile Thr Tyr Leu Arg Pro Lys Ser Ser His 265 270 Leu Pro Gly Met Asp Lys Leu Leu Ala Leu Phe Tyr Thr Ala Val Thr 280 Ser Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys

```
Thr Ala Leu Arg Lys Thr Leu Ser Leu Lys Thr Ser Arg Ala Ile Asn
                    310
                                        315
Arg
<210> 1808
<211> 309
<212> PRT
<213> Mus musculus
<400> 1808
Met Arg Met Asp Asn Lys Ser Thr Val Ser Glu Phe Ile Leu Leu Gly
Leu Pro Ile Arg Pro Glu Asn Gln Val Ile Tyr Ser Ser Leu Ile Leu
Thr Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu
                            40
Ile Arg Leu Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ala Leu Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys
                    70
                                        75
Met Leu Val Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Asp Gly
                85
                                    90
Cys Val Ser Gln Val Tyr Phe Phe Ile Val Phe Gly Ser Ile Asp Ser
                                105
           100
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Phe Cys His
                            120
                                                125
Pro Leu His Tyr Thr Ile Ile Met Asn Leu Ser Leu Cys Val Leu Leu
                        135
                                            140
Val Gly Met Phe Trp Val Leu Ser Ser Ala Asn Ala Leu Val Gln Thr
                  150
                                        155
Leu Leu Ala Arg Leu Ser His Phe Arg Asn Asn Thr Ile Pro Tyr
                165
                                    170
                                                        175
Tyr Phe Cys Asp Leu Ser Thr Leu Leu Lys Leu Ser Ser Asp Thr
           180
                                                    190
                                185
Thr Ile Asn Asp Leu Ile Ile Leu Val Leu Gly Asn Ala Val Ile Thr
        195
                            200
Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Val Thr
                        215
                                            220
Ile Leu Lys Thr Pro Ser Ile Lys Gly Ile Arg Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ser Ile Ile
                245
                                    250
Gly Leu Tyr Cys Val Pro Ser Ser Asn Asn Thr Ser Glu Lys Asn Ala
            260
                                                    270
                                265
Ile Val Ala Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Gln Asp Met Lys Gly Ala Leu Arg Asn Ile
                        295
Leu Ser Arg Thr Gln
305
<210> 1809
<211> 312
<212> PRT
```

<213> Mus musculus

295

```
<400> 1809
Met Lys Arg Asp Asn Gln Ser Met Val Ser Glu Phe Ile Leu Leu Gly
                                    10
Leu Pro Ile Arg Pro Glu Glu Gln Gly Met Tyr Tyr Ala Leu Phe Leu
                                25
Thr Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu
                            40
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys
                    70
                                        75
Met Leu Arg Asn Met His Ile His Asp Pro Ser Ile Pro Tyr Ala Glu
               85
                                    90
Cys Ile Ala Gln Met Tyr Phe Phe Ile Leu Phe Thr Asp Leu Asp Asn
                                105
           100
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
        115
                            120
Pro Leu His Tyr Thr Thr Ile Met Arg Glu Glu Leu Cys Ile Leu Leu
                       135
                                            140
Val Ala Ile Ser Trp Ile Leu Ser Cys Val Ser Ala Leu Ser His Thr
                   150
                                        155
Leu Leu Leu Ala Arg Leu Ser Phe Cys Ala Asp Asn Thr Ile Ser His
                                    170
               165
                                                        175
Phe Phe Cys Asp Leu Ala Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile
           180
                                185
                                                    190
Ser Leu Asn Glu Leu Val Ile Phe Thr Val Gly Thr Thr Val Ile Thr
                            200
       195
Leu Pro Leu Ile Cys Ile Leu Ile Ser Tyr Gly His Ile Val Ala Thr
                        215
                                            220
Ile Leu Lys Val Ser Ser Asn Lys Gly Ile Cys Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Tyr Tyr Gly Thr Ile Ile
                245
                                    250
Gly Val Tyr Phe Ile Pro Ser Ser Phe Thr Ser Thr Asp Lys Gly Ile
                                265
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Phe
                            280
Ile Tyr Ser Ile Arg Asn Arg Asp Met Lys Glu Ala Leu Lys Lys Leu
                       295
Phe Asn Arg Ala Ser Ile Ser Thr
```

```
<210> 1810
<211> 313
```

<400> 1810

 Met
 Arg
 Leu
 Lys
 Asn
 His
 Ser
 Ser
 Val
 Ser
 Glu
 Phe
 Leu
 Leu
 Leu
 Gly

 Phe
 Pro
 Ile
 Arg
 Pro
 Glu
 Gln
 Gly
 Ile
 Phe
 Phe
 Ser
 Leu
 Phe
 Leu
 Phe
 Leu
 Phe
 Leu
 Phe
 Leu
 Phe
 Leu
 Phe
 Leu
 Ile
 Ile

<212> PRT

<213> Mus musculus

```
70
Met Leu Thr Lys Val Gln Asn Gln Pro Ile Pro Ile Thr Tyr Glu Glu
                                    90
Cys Val Ser Gln Thr Tyr Phe Phe Ile Phe Phe Ala Asp Leu Asp Ser
            100
                                105
Phe Leu Ile Thr Ser Met Ala Tyr Asp Arg Tyr Met Ala Ile Cys His
                            120
Pro Leu His Tyr Ile Thr Ile Met Ser Gln Ser Arg Cys Ala Met Leu
                        135
                                            140
Val Ala Val Ser Trp Val Ile Ala Ser Ala Cys Ala Leu Leu His Ser
                    150
                                        155
Leu Leu Leu Asp Gln Leu Ser Phe Cys Ala Asp His Thr Val Pro His
                165
                                    170
Phe Phe Cys Asp Leu Gly Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr
            180
                                185
Ser Leu Asn Gln Leu Val Ile Phe Thr Ala Gly Leu Ala Ala Ile Met
                            200
Leu Pro Phe Leu Cys Ile Leu Ile Ser Tyr Gly Arg Ile Gly Phe Thr
                        215
                                            220
Ile Leu Gln Val Pro Thr Thr Lys Gly Ile Cys Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ala Leu Tyr Tyr Gly Ser Ile Ile
                245
                                    250
Gly Leu Tyr Phe Leu Pro Pro Ser Asn Ser Lys Ile Asn Asn Ile
            260
                                265
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Lys Lys Leu
                        295
Leu Ser Lys Lys Thr Glu Phe Ser Lys
                    310
<210> 1811
<211> 310
<212> PRT
<213> Mus musculus
<400> 1811
Met Glu Gly Val Asn Gln Thr Arg Phe Val Ser Glu Phe Ile Leu Leu
                                    10
Gly Leu Ser Pro Arg Pro Glu Asp Gln Lys Pro Leu Phe Ile Leu Phe
                                25
Leu Thr Ile Tyr Leu Val Thr Leu Thr Gly Asn Leu Leu Ile Ile Leu
                            40
Ala Ile Arg Ser Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser Phe Leu Ser Leu Thr Asp Ile Cys Phe Thr Thr Thr Ile Val Pro
                    70
                                        75
Lys Met Leu Val Asn Phe Leu Ser Glu Lys Lys Thr Ile Ser Tyr Ala
                                    90
Gly Cys Leu Thr Gln Met Tyr Phe Leu Tyr Ala Leu Gly Asn Ser Asp
                                105
Ser Cys Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Val Ala Ile Cys
                            120
Asn Pro Phe His Tyr Val Thr Ile Met Asn His His Arg Cys Ala Leu
                                            140
Leu Val Thr Phe Ser Cys Ser Phe Pro His Phe His Ser Leu Leu His
```

```
Thr Leu Leu Asn Leu Leu Thr Phe Cys Asp Ser Asn Val Ile His
                                  170
His Phe Leu Cys Asp Leu Ser Pro Leu Leu Lys Leu Ser Cys Ser Ser
           180
                              185
                                                  190
Thr Phe Val Asn Glu Ile Val Ile Val Thr Glu Gly Ala Leu Val Leu
                          200
Val Thr Pro Phe Leu Cys Ile Ala Phe Ser Tyr Ile Arg Ile Leu Val
                      215
Thr Val Leu Lys Ile Pro Ser Ala Ala Gly Lys Arg Lys Ala Phe Ser
                   230
                                      235
Thr Cys Gly Ser His Phe Thr Val Val Thr Leu Phe Tyr Gly Ser Ile
              245
                                  250
Phe Tyr Val Tyr Leu Gln Pro Val Ser Thr Tyr Thr Val Lys Asp His
           260
                              265
Ile Ala Thr Ile Val Tyr Thr Val Leu Ser Ser Met Leu Asn Pro Phe
                          280
Ile Tyr Ser Leu Arg Asn Lys Asp Leu Lys Gln Gly Leu Arg Lys Leu
290 295
Ile Ser Arg Arg His Ile
```

<210> 1812

<211> 315

<212> PRT

<213> Mus musculus

<400> 1812

Met Met Thr Arg Asn His Ser Ser Val Ser Glu Phe Leu Leu Gly 10 Leu Ser Glu His Trp Glu Gln Glu Pro Leu Phe Gly Ile Phe Leu 25 Val Ile Tyr Leu Val Thr Val Val Gly Asn Thr Leu Ile Ile Leu Ala 4.0 Ile Val Ser Asp Pro His Leu His Ser Pro Met Tyr Phe Phe Leu Ala 55 60 Asn Leu Ser Leu Thr Asp Met Cys Leu Ser Ser Thr Thr Val Pro Arg 75 70 Met Leu Val Asn Ile Gln Thr Gln Arg His Ser Ile Pro Tyr Ala Gly 90 8.5 Cys Leu Ser Gln Ile Tyr Phe Phe Leu Trp Phe Ile Gly Leu Asp Val 105 100 110 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Leu Val Ala Ile Cys Tyr 120 125 Pro Leu His Tyr Thr Leu Val Met Ser Pro Arg Cys Cys Ile Leu Leu 135 140 Val Thr Thr Ser Leu Phe Leu Ala His Ser Tyr Ala Leu Thr His Ile 150 155 Ile Leu Ser Gln Leu Ser Phe Cys Met Asp Asn Ile Ile Leu His 170 165 175 Phe Phe Cys Glu Leu Leu Pro Met Leu Lys Leu Ser Cys Ser Asn Thr 185 190 Tyr Ala Asn Gln Cys Val Leu Leu Tyr Trp Gly Gly Ala Leu Thr Val 200 Leu Ile Pro Leu Leu Ile Ile Val Ser Tyr Val Arg Ile Val Ala Thr 215 220 Ile Val Arg Val Pro Ser Ala Ser Gly Lys Trp Lys Thr Phe Ser Thr 235 230 Cys Gly Ser His Leu Ser Ala Val Cys Leu Phe Tyr Val Ser Ala Ile

```
245
                                    250
Gly Val Tyr Phe Ile Pro Tyr Ala Ala Asp Ser Ala Ser Arg Asp Arg
                                                    270
Ile Ala Ser Val Met Tyr Ala Val Val Thr Pro Met Leu Asn Pro Phe
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Met Thr Ser Ala Leu Arg Arg Phe
                        295
Leu Asn Lys Ile Leu Leu Gln Pro Pro Gln Ser
                    310
<210> 1813
<211> 308
<212> PRT
<213> Mus musculus
<400> 1813
Met Asp Asn Ser Ser Trp Thr Ser Val Ser His Phe Val Leu Leu Gly
Ile Ser Thr Asn Pro Val Glu Gln Ile Pro Leu Phe Leu Phe Leu
Leu Met Tyr Ile Ile Asn Ile Ser Gly Asn Phe Phe Ile Val Thr Leu
        35
                            40
Ile Ile Ser Thr Ser His Leu His Thr Pro Met Tyr Ile Phe Leu Ser
                        55
Asn Leu Ala Leu Ala Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys
                    70
                                        75
Met Leu Gln Asn Ile Phe Ser Ser Thr Lys Val Ile Ser Tyr Val Gly
                                    90
Cys Leu Ala Gln Thr Tyr Phe Phe Ile Cys Phe Ala Ala Met Glu Asn
            100
                                105
                                                    110
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys His
                            120
                                                125
Pro Leu Arg Tyr Ser Ser Ile Leu Thr Gly Met Leu Cys Ala Gln Met
                        135
                                            140
Val Ala Leu Cys His Val Leu Ser His Leu His Ala Leu Leu His Thr
                    150
                                        155
Phe Leu Met Gly Arg Leu Ile Phe Cys Ala Asp Asn Arg Ile Pro His
                165
                                    170
                                                        175
Phe Phe Cys Asp Leu Tyr Pro Leu Met Lys Ile Ser Cys Ser Ser Thr
            180
                                185
                                                    190
Gln Leu Asn Thr Leu Met Ile His Thr Glu Gly Val Ile Val Ile Asn
                            200
Gly Ala Leu Ala Phe Ile Ile Ala Ser Tyr Ala Phe Ile Ile Ser Ala
                        215
                                            220
Val Leu Arg Ile Pro Ser Ala Asn Gly Lys Trp Arg Ser Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly Thr Leu Thr
                245
                                    250
Trp Val Tyr Phe Arg Pro Leu Ser Ser Tyr Ser Val Val Lys Gly Arg
                                265
                                                    270
Ile Val Thr Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Gly Asp Val Lys Glu Ala Phe Arg Lys Trp
                        295
Val Arg Arg Val
305
```

```
<210> 1814
<211> 317
<212> PRT
<213> Mus musculus
<400> 1814
Met Ala Thr Lys Asn Lys Thr Glu Val Thr Glu Phe Val Leu Leu Gly
1
                                    10
Leu Ser Ser Arg Pro Glu Ile Gln Pro Val Ile Phe Gly Val Val Leu
           20
                                25
Ile Met Tyr Leu Met Ala Val Leu Gly Asn Thr Leu Leu Ile Leu Val
        35
                            40
Ala Cys Ser Asp Pro Arg Leu Gln Thr Pro Met Tyr Phe Leu Leu Ser
                        55
                                            60
Gln Leu Ser Leu Ile Asp Ile Ser Leu Thr Thr Ile Thr Ile Pro Gln
                   70
Met Leu Val His Thr Leu Ser Val Asn Arg Ser Ile Ser Tyr Asn Arg
                                    90
                85
Cys Met Thr Gln Leu Phe Phe Phe Met Ala Val Gly Ser Met Glu Val
           100
                                105
Tyr Leu Leu Gly Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asp
                            120
Pro Leu Arg Tyr Ser Ala Ile Val Ser Tyr Ser Leu Cys Leu Gln Ile
                        135
                                            140
Thr Leu Thr Ser Trp Met Val Val Ser Leu Asn Ser Leu Leu Tyr Ser
                    150
Val Leu Val Thr Arg Leu Thr Phe Cys Gly Asn Lys Val Thr His Phe
                165
                                    170
Phe Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Thr Arg Pro Val
            180
                                185
                                                    190
Leu Asn Glu Met Leu Ile Phe Thr Glu Gly Val Ala Val Val Gly Ser
                            200
                                                205
Pro Phe Phe Ile Trp Gly Ser Tyr Val Arg Ile Gly Ile Ala Met
                        215
                                            220
Ala His Met His Ser Phe Ala Ala Leu Lys Lys Ala Leu Ser Thr Cys
                    230
                                        235
Ser Ser His Ile Leu Val Val Leu Leu Phe Gly Thr Leu Ala Arg
                245
                                    250
Met Tyr Leu Lys Pro Ser Ser Ser Tyr Asp Leu Gly Gln Asp Arg Gln
            260
                                265
                                                    270
Val Ala Ile Phe Tyr Thr Leu Ile Ser Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Gln Asp Val Lys Gly Ala Leu Trp Arg Leu Phe
                        295
Arg Lys Leu His Thr Ser Asp Trp Leu Ser Asp Lys Glu
305
                    310
<210> 1815
<211> 308
<212> PRT
<213> Mus musculus
<400> 1815
Met Ile Thr Glu Asn Trp Thr Leu Ala Gln Asp Phe Leu Leu Gly
                                    10
1
Phe Pro Gly Ser Gln Val Leu Gln Phe Ser Leu Phe Leu Phe Leu
Val Met Tyr Leu Leu Thr Ile Gly Gly Asn Met Ala Ile Leu Leu Leu
```

```
40
Val Ser Thr Ser His Gln Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                             60
Asn Leu Ser Phe Leu Glu Ile Trp Tyr Thr Thr Ala Ala Val Pro Lys
                    70
                                         75
                                                             80
Ala Leu Ala Ile Leu Val Gly Lys Ser Gln Ser Ile Ser Phe Leu Gly
                                     90
Cys Leu Phe Gln Met Tyr Leu Val Phe Ser Leu Gly Cys Thr Glu Tyr
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Phe
                            120
Pro Leu His Tyr Gln Thr Ile Met Asn Ser Leu Leu Ser Ala Gln Leu
                        135
                                             140
Ala Leu Ser Ser Trp Ile Cys Gly Phe Leu Ala Ile Ser Val Pro Ala
                    150
                                         155
Ala Leu Ile Ser Thr Leu Ser Phe Cys Gly Thr His Ala Ile Asn His
                165
                                     170
Phe Phe Cys Asp Ile Ala Pro Trp Ile Ala Leu Ala Cys Thr Ser Thr
            180
                                185
Gln Gly Val Glu Thr Val Ala Phe Val Ile Ala Phe Val Val Ile Leu
                            200
Ser Ser Cys Leu Ile Thr Leu Ile Ser Tyr Ala Tyr Ile Ile Arg Thr
                        215
Ile Leu Arg Ile Pro Ser Thr Ser Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ser Ser His Leu Thr Val Val Leu Ile Trp Tyr Gly Ser Thr Ile
                245
                                     250
Phe Leu His Val Arg Thr Ser Ile Lys Asp Asp Leu Gln Leu Thr Lys
Ala Val His Val Leu Asn Thr Val Val Thr Pro Ala Leu Asn Pro Phe
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Glu Ile Leu Gly Lys Lys
    290
                        295
Trp Lys Arg Lys
305
<210> 1816
<211> 308
<212> PRT
<213> Mus musculus
<400> 1816
Met Met Asn Ser Thr Met Val Thr Glu Phe Leu Leu Glu Val Phe Ala
                 5
                                    10
Glu Thr Trp Glu Leu Arg Ile Leu Leu Thr Val Leu Phe Leu Leu Met
            20
                                25
Tyr Leu Gly Ser Leu Phe Gly Asn Leu Ile Ile Ile Val Thr Thr
        35
                            40
Val Asp Gln Thr Leu Asn Thr Pro Met Tyr Phe Phe Leu Arg Asn Leu
Ser Ile Leu Asp Met Gly Phe Val Ser Val Thr Val Pro Asn Ala Cys
                    70
                                        75
                                                             80
Ile Asn Ser Leu Thr Asp His Arg Asn Ile Ser Val Ala Gly Cys Ala
                                    90
                                                         95
Ala Gln Ile Phe Leu Val Phe Phe Cys Ser Cys Val Glu Ile Gln Phe
            100
                               105
Leu Thr Thr Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
```

120

```
Met Tyr Pro Val Ile Met Thr His Gln Phe Cys Val Gln Met Thr Leu
    130
                        135
Ala Ser Leu Leu Thr Ser Leu Ile Leu Ala Ser Val His Thr Ser Lys
                    150
                                        155
Thr Phe Gln Leu Ser Phe Cys His Ser Asn Ile Val Pro Gln Phe Phe
                165
                                    170
Cys Asp Ile Pro Ser Leu Leu Arg Leu Ser Cys Ser Asp Thr Phe Asn
                                185
Asn Lys Leu Leu Leu Leu Ser Ala Ile Gly Leu Ser Gly Ser Cys
        195
                            200
Phe Thr Phe Ile Ala Val Ser Tyr Val Arg Ile Leu Ser Thr Val Leu
                        215
Lys Val Pro Val Lys Gly Glu Arg Gly Lys Ala Phe Ser Thr Cys Val
                    230
Pro His Ile Ile Val Val Ser Val Phe Leu Ser Ser Gly Ala Tyr Val
                245
                                    250
                                                        255
Tyr Leu Lys Pro Pro Ala Ile Pro Glu Ile Ile Glu Asp Met Thr Leu
            260
                                265
Ser Val Phe Tyr Thr Ile Val Pro Pro Phe Leu Asn Pro Ile Ile Tyr
                            280
Ser Leu Arg Asn Lys Gln Ile Lys Glu Ala Val Lys Lys Val Ile Phe
   290
                        295
                                            300
Arg Phe Leu Ser
305
```

<210> 1817 <211> 319 <212> PRT

<213> Mus musculus

<400> 1817

Met Asp Val Lys Asn Gln Thr Ala Val Thr Glu Phe Ile Phe Leu Gly 1 Phe Pro Gly Ser Ser Ser Leu Gln Leu Pro Leu Phe Met Met Phe Leu 20 Thr Val Tyr Leu Leu Ser Leu Met Gly Asn Thr Leu Ile Ile Phe Leu 35 40 Ile Leu Val Asp Ser Thr Leu Gln Thr Pro Met Tyr Ile Phe Leu Gly 55 Asn Leu Ser Phe Leu Glu Ile Trp Tyr Thr Thr Ala Thr Val Pro Lys 70 Leu Leu Ala Thr Cys Val Thr Lys Val Val Thr Ile Pro Val Ala Gly 85 90 Cys Ile Thr Gln Tyr Tyr Phe Phe Phe Ser Leu Gly Ala Thr Glu Cys 100 105 Ile Leu Leu Ala Val Met Ala Tyr Asp Arg His Val Ala Val Cys Arg 115 120 Pro Leu His Tyr Ser Leu Leu Met Ser Val His Ile Cys Leu Arg Phe 135 140 Ser Ala Ala Ser Trp Val Gly Gly Phe Leu Ala Pro Leu Leu Pro Thr 150 155 Ile Leu Ile Ser Gln Leu Asn Phe Cys Gly Pro Gln Lys Ile Asn His 165 170 Phe Phe Cys Asp Ser Asp Pro Ile Phe Lys Leu Ser Cys Ser Asp Thr 185 190 Phe Leu Val Glu Ala Leu Gly Tyr Thr Cys Ser Ser Val Val Ile Leu 200 Ser Ser Phe Leu Leu Thr Met Ser Ser Tyr Gly Asn Ile Val Val Thr

```
210
                        215
                                            220
Ile Ile Arg Leu Ser Ser Arg Glu Ala Arg Lys Lys Thr Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Val Thr Ile Tyr Tyr Gly Thr Ile Ile
                245
                                     250
Phe Ala Tyr Val Arg Pro Pro Ala Lys Tyr Asn Phe Thr Ile Gly Lys
                                265
Val Val Ser Val Phe Tyr Cys Val Ile Thr Pro Leu Val Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Lys Asp Val Met Lys Ala Phe Gln Lys Phe
                        295
                                            300
Leu Ser Gln Lys Lys Phe Leu Met Gly Lys Asn Met His Gly Leu
                    310
<210> 1818
<211> 309
<212> PRT
<213> Mus musculus
<400> 1818
Met Met Asn Ser Thr Met Val Thr Glu Phe Leu Leu Glu Val Phe Ala
                 5
Glu Thr Trp Glu Leu Arg Val Leu Leu Ser Val Leu Phe Leu Leu Val
            20
Tyr Leu Gly Ser Leu Phe Gly Asn Leu Thr Ile Ile Ile Val Thr Thr
                            40
Val Asp Gln Thr Leu Asn Thr Pro Met Tyr Phe Phe Leu Arg Asn Leu
Ser Ile Leu Asp Met Cys Tyr Val Ser Ile Thr Val Pro Asn Ala Cys
                    70
                                        75
                                                             80
Ile Asn Ser Leu Thr Asp His Arg Asn Ile Ser Val Thr Gly Cys Ala
                                     90
                                                         95
Ala Gln Ile Phe Leu Phe Phe Phe Cys Ala Cys Val Glu Val Gln Phe
            100
                                105
Leu Thr Ile Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
Leu Tyr Pro Met Ile Met Asn His Gln Phe Cys Val Gln Met Thr Leu
    130
                        135
                                            140
Ala Ser Leu Leu Thr Ser Leu Ile Leu Ser Gly Met Asn Thr Phe Lys
                    150
                                        155
Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Pro Gln Phe Phe
                165
                                    170
Cys Glu Leu Pro Ala Leu Leu Arg Leu Thr Cys Ser Asp Thr Phe Asn
            180
                                185
Asn Lys Ile Ile Leu Leu Thr Ala Ile Gly Leu Ser Gly Thr Cys
        195
                            200
Phe Thr Phe Ile Ala Ile Ser Tyr Val Arg Ile Leu Ser Thr Val Leu
    210
                        215
                                            220
Lys Val Pro Val Lys Gly Glu Arg Gly Lys Ala Phe Ser Thr Cys Val
                    230
                                        235
Pro His Ile Ile Val Ala Tyr Leu Phe Phe Cys Ser Gly Ala Tyr Ala
                245
                                    250
                                                         255
Tyr Leu Arg Pro Ser Ala Ile Ser Glu Val Val Glu Asp Met Thr Leu
            260
                                265
                                                     270
Ser Val Phe Tyr Thr Thr Val Pro Pro Phe Leu Asn Pro Ile Ile Tyr
                            280
                                                285
```

Ser Leu Arg Asn Lys Pro Asn Lys Glu Gly Cys Glu Glu Ser Asn Ile

```
<210> 1819
<211> 313
<212> PRT
<213> Mus musculus
<400> 1819
Met Pro Asn Ile Thr Ala Phe Thr Gly Phe Leu Leu Thr Ala Phe Phe
Asp Ser Gln Glu Leu Gln Thr Leu Trp Gly Val Phe Phe Leu Gly Ile
                                25
Tyr Leu Glu Ala Leu Met Ser Asn Leu Ile Ile Ile Thr Leu Ile Thr
Leu Asp Leu Gln Leu Gln Thr Pro Met Tyr Phe Phe Leu Lys Asn Leu
                        5.5
Ser Leu Leu Asp Val Phe Phe Val Ser Val Pro Ile Pro Lys Phe Val
                    70
Val Asn Ser Leu Ile His Asn Asn Ser Ile Ser Val Leu Ala Cys Ala
                                                         95
Phe Gln Val Phe Leu Met Thr Ser Phe Ser Ser Gly Glu Val Phe Val
            100
                                105
                                                     110
Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
                            120
                                                125
Asn Tyr Gly Ala Ile Met Asn Asn His Thr Cys Val Leu Met Met Gly
   130
                        135
                                            140
Val Ser Trp Ala Thr Gly Met Leu Phe Gly Ala Ile Tyr Thr Ala Gly
                    150
                                        155
Thr Phe Ser Met Pro Phe Cys Gly Ser Asn Val Ile Pro Gln Phe Phe
                165
                                    170
Cys Asp Val Pro Ser Leu Leu Arg Ile Ser Cys Ser Glu Thr Leu Val
            180
                                185
                                                     190
Ala Ile Tyr Ser Cys Leu Gly Ile Gly Val Cys Leu Gly Met Ser Cys
        195
                            200
Phe Ile Cys Val Val Ile Ser Tyr Phe Tyr Ile Phe Ser Thr Val Leu
                        215
                                             220
Lys Ile Pro Thr Thr Lys Gly Gln Ser Lys Ala Phe Ala Thr Cys Ile
                    230
                                        235
Pro His Leu Thr Val Phe Thr Val Phe Leu Val Thr Ala Cys Phe Val
                245
                                    250
Tyr Leu Lys Pro Phe Thr Asn Thr Leu Ser Ile Ser Glu Arg Leu Phe
            260
                                265
Ser Val Leu Tyr Thr Val Leu Pro Pro Ala Leu Asn Pro Leu Ile Tyr
                            280
Ser Leu Arg Asn Thr Asp Val Lys Ser Ala Leu Arg Arg Leu Gln Gln
                        295
Asn Leu Cys Leu Arg Arg Leu Leu Ile
                    310
<210> 1820
<211> 319
<212> PRT
<213> Mus musculus
<400> 1820
```

Met Pro Asn Val Thr Ala Val Thr Gly Phe Ile Leu Met Gly Phe Ser

His Ile Phe His Ser

```
Asp Ile His Glu Leu Gln Ile Leu Cys Gly Val Leu Phe Leu Val Leu
                                25
Tyr Leu Gly Ile Leu Met Ser Asn Leu Leu Ile Ile Ile Leu Ile Thr
                            40
Val Asp Leu Lys Leu Gln Thr Pro Met Tyr Phe Phe Leu Lys Asn Leu
                        55
Ser Leu Leu Asp Val Phe Leu Val Ser Val Thr Ile Pro Asn Phe Phe
                    70
Val Asn Ser Leu Met His Lys Asn Ser Ile Ser Ile Leu Gly Cys Ala
                                    90
Phe Gln Val Phe Phe Met Ala Leu Leu Gly Ser Gly Glu Val Phe Val
                                105
Leu Thr Thr Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Ser Pro Leu
                            120
                                                125
His Tyr Glu Val Ile Met Asn Ser Val Thr Cys Val Val Met Met Ser
                        135
Val Ser Trp Gly Thr Gly Leu Phe Phe Gly Val Met Tyr Thr Ala Gly
                    150
Thr Phe Ser Met Thr Phe Cys Gly Ser Asn Val Ile Pro Gln Ile Phe
                165
                                    170
Cys Asp Val Pro Ser Leu Leu Arg Ile Ser Cys Ser Gly Ser Leu Met
Ile Ile Tyr Ile Ser Leu Gly Ile Gly Val Cys Leu Gly Met Ser Cys
        195
                            200
Phe Ile Cys Val Gly Ile Ser Tyr Ile Tyr Ile Phe Ser Thr Val Leu
                        215
Lys Ile Pro Thr Thr Lys Gly Gln Ser Lys Ala Phe Gly Thr Cys Ile
                    230
Pro His Leu Thr Val Phe Ser Val Phe Ile Ala Thr Ala Cys Phe Val
                245
                                    250
Tyr Leu Lys Pro Pro Ser Asn Ser Ala Ser Leu Thr Asp Arg Leu Phe
                                265
            260
Ser Val Leu Tyr Thr Val Leu Pro Pro Ala Leu Asn Pro Val Ile Tyr
                            280
Ser Leu Arg Asn Asn Asp Val Asp Ser Ala Leu Lys Arg Leu Leu Gln
                        295
Asn Leu Tyr Ser Arg Asp Phe Leu His Val Ile His Gln Asn Val
                    310
<210> 1821
<211> 312
<212> PRT
<213> Mus musculus
<400> 1821
Met Arg Asn Gly Thr Ala Ile Thr Glu Phe Ile Leu Leu Gly Phe Pro
Gly Ile Gln Gly Ser Glu Ala Leu Leu Phe Ile Val Ile Phe Leu Ile
Tyr Ile Leu Thr Leu Ser Gly Asn Gly Leu Ile Ile Val Ile Val Trp
```

Val Glu Pro Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu

Ala Phe Leu Glu Ile Trp Tyr Thr Thr Thr Val Ile Pro Lys Leu Leu

Glu Thr Phe Val Val Ser Lys Thr Val Ile Cys Thr Ala Cys Cys Leu

90

95

```
Leu Gln Ala Phe Phe His Phe Phe Leu Gly Thr Thr Glu Phe Leu Ile
            100
                                105
Leu Gly Ser Met Ser Phe Asp Arg Tyr Leu Ala Ile Cys Lys Pro Leu
                                                125
                            120
       115
Arg Tyr Pro Thr Ile Met Thr Ser Asn Leu Cys Leu Gln Leu Ala Leu
                        135
Ser Ser Trp Leu Ala Gly Phe Thr Ile Val Phe Cys Gln Thr Met Leu
                    150
Ile Val Gln Leu Pro Phe Cys Gly Asn Asn Val Ile Asn His Phe Tyr
               165
                                    170
Cys Asp Val Gly Pro Ile Leu Lys Ala Ala Cys Ala Asp Thr Ser Ile
           180
                                185
Leu Glu Leu Leu Gly Leu Leu Ala Thr Ile Leu Val Ile Pro Gly Ser
       195
                            200
Leu Leu Phe Thr Ile Ile Ser Tyr Ile Tyr Ile Leu Ser Thr Ile Leu
                        215
Arg Ile Pro Ser Ala Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala
                    230
Ser His Leu Thr Val Val Ser Leu Leu Tyr Gly Ala Val Leu Phe Met
                245
                                    250
Tyr Leu Arg Pro Thr Ala His Ser Ser Phe Lys Ile Asn Lys Val Val
                                265
                                                    270
            260
Ser Val Leu Asn Thr Ile Leu Thr Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
Thr Ile Arg Asn Lys Glu Val Lys Gly Ala Leu Arg Lys Ala Ile Thr
                        295
Cys Ala Asn Arg His His Ala Lys
                    310
```

<210> 1822

<211> 307

<212> PRT

<213> Mus musculus

<400> 1822

Met Glu Ser Gly Asn Leu Ser Met Ile Ile Glu Phe Ile Leu Thr Gly 10 Phe Pro Thr Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu Phe Leu 20 25 Gly Ile Tyr Leu Val Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu 40 45 Ile Val Leu Ser Ser Gly Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 60 Ser Leu Ser Phe Ile Asp Leu Cys His Ser Thr Val Ile Thr Pro Lys 70 75 Met Leu Leu Asn Phe Leu Leu Glu Glu Asn Ile Ile Ser Tyr Pro Glu 8.5 90 Cys Met Thr Gln Leu Tyr Phe Phe Ser Leu Phe Ala Ile Ala Glu Cys 105 100 His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Lys Val Val Met Ser His His Val Cys Phe Trp Phe 135 Thr Val Gly Val Tyr Thr Leu Gly Ile Leu Gly Ser Ser Val His Thr 150 155 Gly Leu Met Leu Lys Leu Phe Phe Cys Lys Thr Asn Lys Ile Asn His 170 Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Ser Cys Ser Ser Ile

```
185
Tyr Ile Asn Glu Leu Leu Val Leu Phe Leu Ser Ala Leu Asn Ile Leu
                            200
Thr Pro Ala Leu Thr Ile Leu Met Ser Tyr Ile Leu Ile Ile Val Ser
                        215
Ile Leu Arg Ile Arg Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ser Ala Val Ala Leu Phe Tyr Gly Ser Ala Ala
                245
                                    250
Phe Thr Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asn Gln Gly Lys
                                265
Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ser Ile Lys Lys Ile
Leu Asn Arg
305
<210> 1823
<211> 307
<212> PRT
<213> Mus musculus
<400> 1823
Met Gly Thr Gly Asn His Ser Met Val Thr Glu Phe Ile Leu Ala Gly
                                    10
                 5
Phe Ser Thr Lys Pro Glu Leu His Leu Pro Leu Phe Leu Leu Phe Leu
                                25
Gly Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu
                            40
Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                       55
                                            60
Ser Leu Ser Phe Ile Asp Leu Cys His Ser Thr Val Ile Thr Pro Lys
                    70
                                        75
Met Leu Val Asn Phe Val Thr Glu Lys Asn Ile Ile Ser Tyr Pro Glu
                                    90
               8.5
Cys Met Thr Gln Leu Tyr Cys Phe Leu Val Phe Ala Ile Ala Glu Cys
           100
                                105
His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Asn Val Val Met Ser His His Leu Cys Phe Trp Leu
                        135
                                            140
Thr Val Gly Val Tyr Ser Leu Gly Ile Val Gly Ser Ser Val His Thr
                    150
                                        155
Gly Phe Met Leu Lys Leu Asn Phe Cys Lys Ile Asn Val Ile Asn His
                                    170
               165
                                                        175
Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Ser Cys Ser Ser Ile
           180
                                                    190
                                185
Tyr Ile Asn Glu Leu Leu Val Leu Phe Leu Ser Ala Leu Asn Ile Leu
       195
                            200
                                                205
Thr Pro Ala Leu Thr Ile Leu Met Ser Tyr Ile Phe Ile Ile Val Ser
                        215
                                            220
Ile Leu Arg Ile Arg Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Tyr Gly Ser Ala Ala
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
```

Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Leu 275 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Val Lys Lys Ile 295 290 300 Leu Asn Arg 305 <210> 1824 <211> 314 <212> PRT <213> Mus musculus <400> 1824 Met Phe Gln Gly Asn Leu Ser Gly Val Thr Glu Phe Asn Leu Ala Gly Leu Thr Asp Lys Pro Gly Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu 20 Gly Ile Tyr Val Val Thr Val Val Gly Asn Leu Ser Met Ile Thr Leu 35 Ile Leu Phe Ser Ser Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Ser 55 Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Ile Val Ile Ile Pro Lys 70 Met Leu Val Asn Phe Val Thr Val Gln Asn Ile Ile Ser Tyr Pro Glu 90 Cys Met Thr Gln Phe Cys Ile Phe Ala Thr Phe Thr Ile Ala Glu Cys 105 His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu Leu Tyr Asn Ala Val Met Ser Tyr Gln Val Cys Ser Trp Met 135 140 Ile Phe Gly Val Tyr Ile Met Ala Phe Val Gly Ala Thr Thr Gln Thr 150 155 Val Phe Met Leu Lys Val His Phe Cys Lys Ala Asn Val Ile Asn His 170 Tyr Phe Cys Asp Leu Ser Pro Leu Leu Glu Leu Ser Cys Ser Asp Thr 185 190 180 Phe Ile Asn Glu Val Leu Ala Leu Cys Phe Ser Val Phe Asn Ile Phe 200 205 Ile Pro Thr Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Ala Ser 215 Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Phe Gly Ser Leu Ala 245 250 Phe Met Tyr Leu Gln Pro Ser Ser Ile Asn Ser Met Asp Gln Arg Lys 270 Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu 275 280 285 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Asn Lys Phe 295 300 Leu Glu Arg Ile Phe Ser Cys Glu Gln Asn 305 310

<210> 1825

<211> 311

<212> PRT

```
<400> 1825
Met Leu Lys Gly Asn Leu Ser Glu Val Thr Glu Phe Ile Leu Ala Gly
Leu Thr Asn Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu
Ala Ile Tyr Val Val Thr Val Val Gly Asn Leu Gly Met Ile Ile Leu
        35
                            40
Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Thr Val Ile Ile Pro Lys
                    70
                                         75
                                                             80
Met Leu Val Asn Phe Val Thr Val Lys Asn Ile Ile Ser Tyr Pro Glu
                85
                                    90
Cys Met Thr Gln Leu Tyr Phe Phe Val Thr Phe Ala Ile Ala Glu Cys
                                105
His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Asn Ala Val Met Ser Phe Gln Val Cys Ser Ser Met
                        135
                                             140
Ile Phe Gly Val Tyr Ser Ile Ala Leu Ile Gly Ala Thr Thr His Thr
                    150
                                         155
Val Cys Met Leu Arg Val Asn Phe Cys Lys Ala Asn Val Ile Asn His
                                    170
Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Pro Cys Ser Asp Thr
            180
                                                     190
Phe Ile Asn Glu Val Val Leu Cys Phe Ser Val Phe Asn Ile Phe
                            200
Ile Pro Thr Leu Thr Ile Leu Thr Ser Tyr Ile Phe Ile Ile Ala Ser
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Phe Gly Ser Leu Ala
                245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
                                265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Asn Lys Phe
                        295
Phe Glu Arg Lys Phe Phe Leu
305
                    310
<210> 1826
<211> 314
<212> PRT
<213> Mus musculus
<400> 1826
Met Phe Gln Gly Asn Leu Ser Gly Val Thr Glu Phe Asn Leu Ala Gly
                                    10
Leu Thr Asp Lys Pro Gly Leu Gln Val Pro Leu Phe Leu Phe Leu
            20
                                                    30
Gly Ile Tyr Val Val Thr Val Val Gly Asn Leu Ser Met Ile Thr Leu
        35
                            40
Ile Leu Phe Ser Ser Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
```

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Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Asn Val Ile Ile Pro Lys
Met Leu Val Asn Phe Leu Ala Val Lys Asn Ile Ile Ser Tyr Pro Glu
                                    90
Cys Leu Thr Gln Leu Cys Phe Phe Ala Thr Phe Gly Ile Ala Glu Cys
                                105
           100
Gln Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
        115
                            120
                                                125
Pro Leu Leu Tyr Asn Ala Val Met Ser Phe Gln Val Cys Ser Trp Met
                        135
                                            140
Ile Phe Gly Val Phe Ser Met Ala Leu Ile Gly Ala Thr Thr Gln Thr
                    150
                                        155
Val Cys Met Leu Arg Val Asp Phe Cys Asn Ala Asn Val Ile Asn His
               165
                                    170
Tyr Phe Cys Asp Leu Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
           180
                                185
                                                    190
Phe Ile Asn Glu Val Leu Ala Leu Cys Phe Ser Val Phe Asn Ile Phe
                            200
        195
Ile Pro Thr Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Ala Ser
                        215
                                            220
Ile Leu Gln Ile Lys Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Phe Gly Ser Leu Ala
                245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
                                265
            260
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
                                               285
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Asn Lys Phe
                       295
Leu Glu Arg Ile Phe Ser Cys Lys Gln Asn
                    310
```

<210> 1827

<211> 312

<212> PRT

<213> Mus musculus

<400> 1827

Met Ala Tyr Ser Asn Gln Ser Arg Val Thr Glu Phe Ile Ile Ala Gly 10 Leu Thr Asn Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu Phe Leu 20 25 Gly Ile Tyr Leu Phe Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu 4 O 4.5 Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 60 Ser Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Ile Ile Thr Pro Lys 70 75 Met Leu Val Asn Phe Val Thr Thr Lys Asn Val Ile Ser Tyr Gln Glu 90 Cys Met Thr Gln Leu Tyr Phe Phe Ile Ala Phe Val Ile Ser Glu Cys 105 100 110 His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Val Cys Ser Trp Met 135 Val Gly Gly Val Tyr Gly Met Gly Phe Ile Gly Ala Ala Ile His Thr

```
145
                    150
Phe Cys Met Leu Arg Val Val Phe Cys Lys Asp Asn Ile Ile Asn His
                                    170
                                                        175
                165
Tyr Phe Cys Asp Leu Phe Pro Leu Met Glu Leu Ala Cys Ser Ser Thr
                                185
                                                    190
            180
Tyr Val Asn Glu Val Val Leu Leu Ser Leu Ser Ala Phe Asn Ile Phe
        195
                            200
Ile Pro Thr Leu Thr Ile Leu Gly Ser Tyr Ile Phe Ile Ile Ile Ser
                        215
                                          . 220
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Phe Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Phe Ser Ala Val Ser Val Phe Phe Gly Ser Leu Ala
                245
                                    250
Phe Met Tyr Leu Gln Pro Phe Ser Val Ser Ser Lys Asp Lys Gly Lys
                                                    270
Val Ser Ser Val Phe Tyr Thr Thr Ile Val Pro Met Leu Asn Pro Met
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Leu Ala Leu Asn Lys Leu
                        295
Phe Gln Lys Lys Phe His Val
                    310
<210> 1828
<211> 314
<212> PRT
<213> Mus musculus
<400> 1828
Met Asn Pro Ala Asn His Ser Gln Val Ala Thr Phe Phe Leu Leu Gly
Leu Ser Gln Val Trp Glu Leu Arg Phe Leu Phe Phe Thr Val Phe Ser
                                25
Ala Val Tyr Leu Leu Thr Val Thr Gly Asn Leu Leu Ile Val Ala Ile
        35
                            40
Val Thr Ser Asp Pro Arg Leu His Thr Thr Met Tyr Phe Leu Leu Gly
                        55
Asn Leu Ser Phe Leu Asp Phe Cys Tyr Ser Ser Ile Thr Ala Pro Arg
                    70
                                        75
Met Leu Val Asp Leu Leu Ser His Ser Pro Thr Ile Ser Phe Gly Ala
                                    90
Cys Leu Thr Gln Leu Phe Phe Phe His Phe Ile Gly Gly Ile Lys Ile
            100
                                105
Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Ser Gln
                            120
                                                125
Pro Leu Arg Tyr Thr Leu Ile Met Asn Gln Thr Val Cys Gly Ile Phe
                        135
                                            140
Met Ala Ala Ser Trp Val Gly Gly Phe Ile His Ser Ile Val Gln Val
                    150
                                        155
Gly Leu Thr Ile His Leu Pro Phe Cys Gly Pro Asp Lys Leu Asp Asn
                                    170
Phe Tyr Cys Asp Val Pro Gln Leu Ile Lys Leu Ala Cys Thr Asp Thr
```

185 Phe Val Leu Glu Leu Leu Met Val Ser Asn Asn Gly Leu Val Thr Leu 200

Met Cys Phe Leu Val Leu Leu Gly Ser Tyr Thr Ala Leu Leu Val Met

Leu Arg Ser His Ser Lys Glu Gly Arg Ser Lys Ala Leu Ser Thr Cys

190

205

220

235

180

Ala Ser His Ile Thr Val Val Thr Ile Ile Phe Val Pro Cys Ile Tyr 245 250 Ile Tyr Ala Arg Pro Phe Arg Thr Phe Pro Met Asp Lys Ala Val Ser 260 265 Val Leu Tyr Thr Met Val Thr Pro Met Leu Asn Pro Ala Ile Tyr Thr 280 Leu Arg Asn Lys Glu Val Ile Val Ala Met Lys Lys Leu Trp Arg Arg 295 300 Lys Lys Asp Phe Leu Gly Ser Ser Asp His 310 <210> 1829 <211> 312

<212> PRT <213> Mus musculus

<400> 1829 Met Gly Asn Tyr Ser Ala Val Thr Glu Phe Phe Leu Val Gly Leu Ser Gln Tyr Pro Glu Leu Gln Leu Phe Leu Phe Val Leu Cys Leu Ile Met 25 Tyr Leu Ile Ile Leu Leu Gly Asn Ser Leu Leu Ile Ile Ser Ile Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu 50 Ser Phe Leu Asp Ile Cys Tyr Thr Ser Ser Ser Ile Pro Gln Met Leu 70 Ile Met Phe Met Ser Ala Arg Lys Ser Ile Ser Phe Leu Gly Cys Ala 90 Leu Gln Met Val Ile Ser Leu Gly Leu Gly Ser Thr Glu Cys Val Leu 105 Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Asn Pro Leu 120 125 Arg Tyr Pro Ile Ile Met Asn Lys Val Leu Tyr Val His Met Ala Val 130 135 Trp Ser Trp Val Ile Gly Cys Leu Asn Ser Leu Val Gln Thr Val Leu 150 155 Thr Met Val Leu Pro Phe Cys Gly Asn Asn Val Ile Asp His Leu Thr 170 Cys Glu Ile Leu Ala Leu Leu Lys Leu Val Cys Ser Asp Ile Thr Met 185 190 Asn Val Leu Ile Met Thr Val Ala Ser Ile Val Leu Leu Met Ile Pro 200 Leu Met Leu Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser Ser Ile Leu 215 220 Arg Ile Asn Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser 230 Ala His Leu Thr Val Val Ile Leu Phe Tyr Gly Ser Ala Leu Phe Met 245 250 Tyr Met Lys Pro Lys Ser Lys Tyr Thr Lys Ala Ser Asp Glu Ile Ile 260 265 Gly Leu Ser Tyr Gly Val Val Thr Pro Met Leu Asn Pro Ile Ile Tyr 280 Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Val Lys Lys Ile Leu Ser 295 300 Lys Arg Leu Tyr Leu Arg Lys Ile 305 310

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<211> 313
<212> PRT
<213> Mus musculus
<400> 1830
Met Glu Pro Gln Asn His Thr Ser Ala Ser Glu Phe Ile Leu Leu Gly
Leu Ser Glu Lys Pro Asp His Asp Pro Val Leu Phe Ser Leu Phe Leu
                                 25
            20
Cys Met Tyr Met Ile Thr Val Val Gly Asn Leu Leu Ile Ile Leu Ala
        35
                             40
Ile Ser Phe Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
Asn Leu Ser Leu Val Asp Phe Cys Leu Ala Thr Asn Thr Val Pro Lys
                    70
Met Leu Val Asn Ile Gln Thr Arg Asn Lys Ser Ile Ser Tyr Pro Cys
                                     90
Cys Leu Thr Gln Met Tyr Phe Phe His Phe Phe Gly Ile Met Asp Ser
                                 105
Val Leu Ile Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
                            120
Pro Leu His Tyr Ser Thr Ile Met Ser Pro Arg Leu Cys Gly Leu Leu
                        135
                                             140
Val Gly Val Pro Trp Val Tyr Ser Cys Phe Ile Ser Leu Thr His Ile
                    150
                                         155
Leu Leu Met Ala Arg Leu Val Phe Cys Gly Lys Asn Glu Leu Pro His
                165
                                     170
Tyr Phe Cys Asp Leu Thr Pro Leu Leu Arg Leu Ser Cys Thr Asp Thr
            180
                                 185
                                                     190
Thr Val Asn Lys Ile Phe Val Leu Ile Val Ala Gly Met Val Ile Ala
                            200
Thr Pro Phe Val Cys Ile Leu Ala Ser Tyr Ala Arg Ile Ile Val Ala
                        215
                                             220
Ile Met Lys Val Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ser Ser His Leu Ser Val Val Ala Leu Phe Tyr Gly Thr Thr Ile
                                     250
Gly Val Tyr Leu Cys Pro Ser Ser Val Arg Thr Ala Val Lys Glu Lys
Ala Ser Ala Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Leu Lys Gly Ala Leu Lys Lys Ile
                        295
                                             300
Ile Asn Arg Lys Ile Ser Thr Ser Ser
<210> 1831
<211> 312
<212> PRT
<213> Mus musculus
<400> 1831
Met Glu Ser Lys Asn Gln Thr Asp Val Ser Glu Phe Phe Leu Met Gly
                -5
                                    10
Ile Thr Asp Asp Ile Ala Leu Lys Pro Leu Ile Phe Ser Met Phe Thr
            20
                                 25
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Ser Met Tyr Leu Ile Thr Ile Leu Gly Asn Leu Leu Ile Ile Leu Thr
Val Cys Ser Asp Ser His Leu Gln Thr Pro Met Tyr Ile Phe Leu Ser
                        55
                                            60
Asn Leu Ser Phe Asn Asp Ile Cys Leu Ser Thr Thr Ile Ile Pro Lys
                    70
                                        75
                                                             8.0
Thr Leu Val Asn Ile His Ala Gln Asp Gln Ser Ile Thr Tyr Thr Ser
                                    90
Cys Leu Thr Gln Ile Cys Phe Thr Leu Leu Phe Cys Ser Phe Glu Ser
                                105
Cys Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu Asn Tyr Thr Thr Ile Met Asn Pro Gln Thr Cys Gly Leu Leu
                        135
                                             140
Ile Leu Leu Ser Leu Ile Ile Ser Leu Val Asn Ser Gly Leu Leu Gly
Leu Met Val Leu Arg Leu Ser Phe Cys Thr Asn Leu Glu Ile Pro Leu
                                    170
Phe Phe Cys Glu Leu Ala Gln Val Ile Lys Leu Ala Cys Ser Asp Thr
                                                    190
                                185
Leu Val Asn Tyr Ile Leu Ile Tyr Leu Ala Thr Ile Ile Leu Asn Gly
                            200
                                                205
Ile Pro Ile Ser Gly Ile Ile Phe Ser Tyr Thr Gln Ile Ala Ser Ser
                        215
Val Leu Arg Met Ser Ser Val Lys Gly Lys Tyr Lys Ala Ile Ser Thr
                                        235
                    230
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ala Leu
                                    250
Gly Val Tyr Ile Ser Ser Ser Phe Thr Thr Ser Val Thr Asn Thr Ala
Phe Ala Tyr Val Met Cys Thr Leu Val Pro Gln Met Leu Asn Pro Phe
        275
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Glu Val Ala Leu Arg Lys His
                        295
Ile Asn Arg Ala Met Cys Leu Leu
305
                    310
```

```
<210> 1832
```

<400> 1832

Met Gly Arg Glu Asn Gln Ser Phe Val Asp Glu Phe Val Leu Leu Gly 10 Leu Ser Gln Asp Ala Gln Thr Gln Ile Leu Leu Phe Val Leu Phe Phe 20 Ile Val Tyr Ile Leu Thr Val Leu Gly Asn Leu Leu Ile Ile Val Leu 35 40 Ile Leu Met Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Arg 55 60 Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Asn Ser Ile Val Pro Gln 70 Val Leu Ser His Phe Leu Val Lys Arg Lys Thr Ile Ser Phe Trp Gly 90 Cys Val Thr Gln Val Ile Val Ser Leu Gln Ile Gly Cys Thr Glu Cys 105 Ala Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Lys

<211> 314

<212> PRT

<213> Mus musculus

```
120
Pro Leu His Tyr Ser Thr Ile Met Thr Gln Gln Leu Cys Leu Gln Leu
                        135
                                            140
Ala Leu Gly Ser Trp Ala Ser Gly Leu Leu Val Cys Leu Val Asp Ile
                   150
Ala Val Ala Phe His Leu Pro Tyr Arg Gly Gln Asn Ile Val Ser His
                165
                                    170
Tyr Phe Cys Glu Leu Pro Ala Leu Leu Lys Val Ala Ser Ala Asp Thr
           180
                                185
Tyr Ser Thr Glu Met Ala Ile Phe Ala Met Gly Val Val Ile Leu Leu
       195
                            200
Ala Pro Val Ser Leu Ile Leu Ile Ser Tyr Trp Asn Ile Ile Ser Thr
                        215
Val Ile Gln Met Gln Ser Gly Glu Gly Arg Leu Lys Val Phe Ser Thr
                    230
Cys Gly Ser His Leu Ile Val Val Leu Phe Tyr Gly Ser Ala Ile
                                    250
Phe Asn Tyr Met Gln Pro Asn Thr Lys Thr Arg Lys Lys Gln Asp Lys
            260
                                265
Ile Met Ser Val Phe Tyr Thr Val Val Thr Pro Met Leu Asn Pro Ile
                        · 280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Phe Arg Lys Leu
                        295
Ala Ala Arg Val Val Phe Phe Arg Lys Gln
<210> 1833
<211> 321
<212> PRT
<213> Mus musculus
<400> 1833
Met Lys Ser Cys Lys Arg Met Thr Trp Gly Asn Trp Thr Thr Val Arg
                                    10
Glu Phe Ile Leu Met Ser Phe Ser Ser Leu Ser Tyr Glu Val Gln Ala
                                25
Leu Leu Phe Leu Phe Leu Ile Ile Tyr Leu Val Thr Leu Met Gly
                            40
Asn Val Leu Ile Ile Leu Val Thr Thr Ala Asp Ser Ala Leu Gln Ser
Pro Met Tyr Phe Phe Leu Arg Asn Leu Ser Phe Leu Glu Ile Gly Phe
                                        75
Asn Leu Val Ile Val Pro Lys Met Leu Ser Thr Leu Ile Leu Gln Asp
                                    90
Lys Thr Ile Ser Phe Leu Gly Cys Ala Thr Gln Met Tyr Phe Phe Phe
                                105
Phe Phe Gly Ala Ala Glu Cys Cys Leu Leu Ala Thr Met Ala Tyr Asp
                            120
       115
                                                125
Arg Tyr Met Ala Ile Cys Asp Pro Leu His Tyr Pro Ile Ile Met Ser
   130
                        135
                                            140
Arg Arg Ser Cys Ala Gln Leu Ala Ala Ala Ser Trp Phe Ser Gly Phe
                   150
                                        155
```

Pro Val Ala Thr Val Gln Thr Thr Trp Ile Phe Ser Phe Pro Phe Cys

Gly Pro Asn Met Val Asn His Phe Phe Cys Asp Ser Pro Pro Val Ile 185 Ala Leu Val Cys Ala Asp Thr Ser Leu Phe Glu Leu Glu Ala Leu Thr 200

170

Ala Thr Val Leu Phe Ile Leu Phe Pro Phe Leu Leu Ile Leu Gly Ser 210 215 Tyr Val Arg Ile Leu Ser Thr Ile Phe Arg Met Pro Ser Ala Glu Gly 230 Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val Ser 245 250 Leu Phe Tyr Ser Thr Ala Ile Leu Thr Tyr Phe Arg Pro Arg Ser Asn 265 Thr Ser Pro Glu Asn Lys Lys Met Leu Ser Leu Ser Tyr Thr Val Ile 285 280 Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Asn Glu Val 300 Lys Ala Ala Leu Arg Arg Ile Ile His Arg Thr Leu Gly Pro Gln Lys 310 315 Leu

<210> 1834 <211> 311 <212> PRT

<213> Mus musculus

<400> 1834

Met Glu Leu Trp Asn Ser Thr Val Gly Ser Gly Phe Ile Leu Val Gly Ile Leu Asp Gly Ser Gly Ser Pro Glu Leu Leu Cys Ala Ala Ile Thr 20 25 Ala Leu Tyr Phe Leu Ala Leu Thr Ser Asn Gly Leu Leu Leu Val 35 Ile Thr Met Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Leu Gly 55 Gln Leu Ser Leu Met Asp Leu Leu Leu Thr Ser Val Ile Thr Pro Lys 70 Ala Val Val Asp Phe Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly 90 Cys Ala Leu Gln Met Phe Leu Glu Leu Ala Leu Gly Ser Ala Glu Asp Leu Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln 120 Pro Leu Asn Tyr Thr Ile Leu Met Ser His Lys Val Cys Trp Leu Met 140 Ile Ala Thr Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Gly Tyr Ser 150 155 Ile Tyr Thr Met Gln Tyr Ser Phe Cys Lys Asn Arg Gln Ile Asn His 170 Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr 185 190 Ser Thr Tyr Glu Leu Met Val Tyr Leu Met Gly Val Ile Val Leu Ile 195 200 205 Leu Pro Leu Thr Ala Ile Leu Ala Ser Tyr Ser Leu Ile Leu Phe Thr 215 220 Val Leu Asn Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Ile 230 235 Cys Ser Ser His Leu Thr Val Val Gly Met Trp Tyr Gly Gly Ala Ser 245 250 Phe Met Tyr Val Leu Pro Ser Pro Phe His Ser Pro Lys Gln Asp Asn 265 Ile Ser Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu

```
280
                                                 285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Lys Arg Val
                        295
                                             300
Leu Gly Lys Arg Leu Ser Ala
                    310
<210> 1835
<211> 310
<212> PRT
<213> Mus musculus
<400> 1835
Met Gly Lys Leu Asn His Thr Tyr Leu Thr Glu Phe Ile Leu Leu Gly
Leu Ser Ser Asp His Gln Thr Gln Ile Leu Leu Phe Val Val Phe Leu
Ile Ile Tyr Leu Ile Thr Val Phe Gly Asn Leu Leu Ile Ile Leu Leu
        35
Ile His Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Lys
                        55
Ile Leu Ser Phe Asn Asp Leu Cys Phe Ser Thr Thr Ile Val Pro Lys
                                         75
                                                             80
                    70
Met Leu Val His Phe Leu Gly Val Arg Lys Thr Ile Ser Phe Ala Gly
                                     90
Cys Ser Val Gln Met Phe Ser Phe Leu Ile Met Gly Cys Thr Glu Ser
            100
                                 105
Ser Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Ile Ala Val Cys Lys
                            120
                                                 125
Pro Leu His Tyr Ser Thr Ile Met Thr His Lys Val Cys Val Leu Leu
                        135
                                             140
Val Val Gly Ser Trp Thr Ser Gly Ile Phe Val Ser Val Val Asp Thr
                    150
                                        155
Ser Phe Thr Leu Cys Leu Thr Tyr Arg Gly Pro Asn Ile Ile Asn His
                165
                                     170
Tyr Phe Cys Glu Pro Pro Ala Leu Leu Lys Leu Ala Ser Glu Glu Thr
            180
                                185
Tyr Thr Ala Glu Met Val Ile Phe Ala Met Gly Ile Ile Ile Leu Leu
        195
                            200
Gly Pro Val Ser Leu Ile Leu Phe Ser Tyr Trp Asn Ile Ile Ser Thr
                        215
                                             220
Val Val Gln Ile Gln Ser Gly Glu Gly Arg Leu Lys Val Phe Ser Thr
                    230
Cys Ser Ser His Phe Ile Val Val Ile Phe Phe Tyr Gly Ser Thr Ile
                245
                                     250
Phe Thr Tyr Met Gln Pro Asn Ser Lys Lys Met Asn Glu Lys Asp Lys
                                 265
                                                     270
Val Ile Ser Val Phe Tyr Ser Ile Val Thr Ser Met Met Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys Val
Leu Lys Arg Glu Ile Arg
<210> 1836
<211> 316
<212> PRT
```

<213> Mus musculus

```
<400> 1836
Met Glu Leu Trp Asn Ser Thr Leu Gly Ser Gly Phe Ile Leu Val Gly
Ile Leu Asp Asp Ser Gly Ser Pro Glu Ile Leu Cys Ala Thr Phe Thr
Ala Leu Tyr Met Leu Ala Met Ile Ser Asn Gly Ile Leu Leu Val
                            40
Ile Thr Met Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Trp
Gln Leu Ser Leu Met Asp Leu Leu Leu Thr Ser Val Ile Thr Pro Lys
                    70
Ala Val Ile Asp Phe Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly
Cys Ala Leu Gln Met Phe Leu Glu Leu Thr Leu Gly Gly Ala Glu Asp
Leu Leu Ala Phe Met Ala Tyr Gly Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu Asn Tyr Met Thr Phe Met Lys Pro Arg Ile Cys Trp Leu Gly
                        135
                                            140
Val Phe Ile Ser Trp Thr Leu Ala Ser Leu Ser Ala Val Gly Tyr Thr
                    150
                                        155
Ile Tyr Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Lys Ile Arg His
                165
                                    170
Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr
                                185
Ser Lys Tyr Glu Leu Met Val Tyr Val Met Gly Val Ile Phe Leu Leu
       195
                            200
Leu Pro Leu Ala Ala Ile Leu Ser Ser Tyr Thr Leu Ile Leu Leu Thr
                        215
Val Leu His Met Pro Ser His Glu Gly Arg Lys Lys Ala Leu Val Thr
                    230
Cys Ser Ser His Leu Thr Val Val Gly Met Trp Tyr Gly Gly Ala Ser
                                    250
Phe Met Tyr Val Leu Pro Ser Ser Phe His Thr Pro Lys Gln Asp Asn
                                265
Ile Phe Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Arg Val
                        295
Leu Gly Gly Arg Leu Leu Pro Glu His Ser Thr Phe
<210> 1837
<211> 317
<212> PRT
```

<213> Mus musculus

<400> 1837

 Met
 Glu
 Phe
 Arg
 Asn
 Ser
 Thr
 Leu
 Gly
 Ser
 Gly
 Leu
 Leu
 Leu
 Phe
 Ile
 Leu
 Val
 Gly
 Ile
 Thr
 Ile
 Thr
 Ile
 Thr
 Ile
 Thr
 Ile
 Thr
 Ile
 Ile</th

```
70
Ala Val Met Asp Phe Leu Leu Arg Asp Asn Thr Ile Ser Phe Gly Gly
Cys Ala Leu Gln Met Phe Ile Glu Leu Val Leu Gly Gly Ala Glu Asp
            100
                                105
Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
Pro Leu Asn Tyr Met Ile Leu Met Ser Pro Arg Val Cys Trp Leu Met
                        135
Val Thr Ala Ser Trp Ile Leu Ser Ile Gln Met Ala Leu Gly Phe Thr
                    150
                                        155
Ile Asn Thr Met His Tyr Ser Phe Cys Lys Ser Arg His Ile Arg His
                165
                                    170
Leu Phe Cys Glu Ile Pro Pro Leu Leu Asp Leu Ala Cys Ala Asp Thr
            180
                                185
Ser Ser Tyr Lys Leu Val Val Tyr Leu Val Gly Val Phe Met Leu Ile
                            200
        195
Leu Pro Leu Thr Ala Ile Phe Phe Ser Tyr Ala Arg Ile Leu Phe Thr
                        215
Val Leu His Met Pro Ser Asn Glu Ser Arg Lys Lys Ala Leu Val Thr
                    230
                                        235
Cys Ser Ser His Met Thr Val Val Gly Met Tyr Tyr Gly Ala Leu Thr
                245
                                    250
Val Met Tyr Phe Leu Pro Ser Ser Tyr His Asn Pro Lys Gln Asp Asn
            260
                                265
Ile Leu Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
                            280
Ile His Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Lys Val
                        295
Leu Gly Asn Thr Cys Cys His His Pro Ile His Leu Arg
<210> 1838
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1838

Met Glu Val Phe Asn Ser Thr Leu Gly Ser Gly Phe Ile Leu Val Gly Ile Leu Asn Asp Ser Gly Phe Pro Glu Met Leu Cys Ala Ile Ile Ile 25 Ala Leu Tyr Phe Leu Ala Leu Thr Ser Asn Gly Leu Leu Leu Val 40 Ile Thr Met Asp Ala Arg Leu His Met Pro Met Tyr Leu Leu Trp 5.5 Gln Leu Ser Leu Met Asp Leu Leu Gln Pro Ser Val Ile Ile Pro Lys 70 75 Ala Val Leu Asp Phe Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly Cys Ala Phe Gln Met Phe Leu Ala Leu Thr Leu Gly Ser Ala Glu Asp 105 Leu Leu Leu Ser Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu Asn Tyr Thr Ile Leu Met Ser Gln Lys Val Cys Tyr Leu Met 135 140 Ile Ala Thr Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Gly Tyr Ser 150 155 160

```
Met Tyr Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Gln Ile Arg His
                                    170
Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Gly Asp Thr
                                185
                                                    190
Ser Thr Tyr Glu Leu Met Val Tyr Leu Met Gly Val Thr Leu Leu Phe
                            200
                                                 205
Pro Ala Leu Ala Ala Ile Leu Thr Ser Tyr Ser Leu Ile Leu Leu Thr
                        215
Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                    230
                                         235
Cys Ser Ser His Leu Thr Val Val Gly Met Trp Tyr Gly Gly Ala Ile
                245
                                    250
Phe Met Tyr Ile Leu Pro Ser Ser Phe His Ser Pro Lys Gln Asp Asn
                                265
Ile Ser Ser Val Phe Tyr Met Ile Val Thr Pro Ala Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Asn Glu Val Ile Glu Ala Leu Lys Arg Val
                        295
Leu Gly Lys Lys Phe Ser Val His Ser Thr Phe
                    310
```

<211> 318

<212> PRT

<213> Mus musculus

<400> 1839

Met Gly Gly Asn Gln Thr Tyr Ile Val Glu Phe Ile Leu Leu Gly Leu Ser Glu Asn Pro Lys Val Gln Ile Leu Leu Phe Cys Ile Phe Leu Ile Ile Tyr Phe Leu Ser Val Phe Gly Asn Leu Val Ile Ile Ile Leu 35 40 Ile Gln Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Lys 55 Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Thr Ser Ile Val Pro Gln 70 Met Leu Val His Phe Leu Ser Lys Arg Lys Thr Ile Ser Phe Ile Gly 90 Cys Ser Ile Gln Ile Val Val Phe Leu Leu Ala Gly Cys Thr Glu Cys 105 Ala Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Lys 120 Pro Leu His Tyr Ser Thr Ile Met Thr Gln Arg Val Cys Cys Gln Leu 135 140 Ala Ile Val Ser Trp Ile Ser Gly Ala Phe Ala Cys Ser Val Asp Ser · 150 155 Ala Phe Thr Leu Cys Ile Pro Tyr Gln Gly Gln Asn Val Ile Asn His 165 170 Tyr Phe Cys Glu Pro Pro Ala Leu Leu Lys Leu Ala Ser Ala Asp Thr 185 190 Tyr Asn Ala Glu Met Ala Leu Phe Leu Val Gly Val Ile Ile Leu Leu 195 200 205 Ala Pro Val Ser Leu Ile Leu Val Ser Tyr Gly Asn Ile Ile Ser Thr 215 220 Val Ile Arg Met Gln Ser Arg Glu Gly Arg Leu Lys Val Phe Ser Thr 230 235 Cys Gly Ser His Leu Thr Val Val Val Leu Tyr Tyr Gly Ser Gly Ile

```
245
                                    250
Phe Ala Tyr Met Arg Pro Asn Ser Lys Thr Met Ser Glu Lys Asp Lys
                                265
Val Val Ser Val Phe Tyr Ser Val Met Thr Ser Met Leu Asn Pro Ile
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Lys Leu
                        295
Val Gly Arg Leu Ser Thr Val Lys Gly Gly Ala Ala Glu Met
                    310
<210> 1840
<211> 319
<212> PRT
<213> Mus musculus
<400> 1840
Met Glu Phe Arg Asn Ser Thr Met Gly Asn Gly Phe Ile Leu Val Gly
Ile Leu Asp Asp Ser Gly Ala Pro Asp Leu Leu Cys Ala Thr Ile Thr
Ala Leu Tyr Met Leu Ala Leu Thr Ser Asn Gly Val Leu Leu Val
        35
Ile Thr Met Asp Ala Arg Leu Arg Val Pro Met Tyr Leu Leu Leu Gly
Gln Leu Ser Leu Met Asp Leu Leu Leu Thr Ser Val Ile Thr Pro Lys
                    70
                                        75
Ala Val Ile Asp Phe Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly
Cys Ala Leu Gln Met Phe Leu Glu Leu Val Leu Gly Ser Ala Glu Asp
                                105
Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
                                                125
Pro Leu Asn Tyr Met Ile Phe Met Arg Pro Ser Val Cys Trp Phe Ile
                                            140
Val Gly Thr Ile Trp Ile Leu Ala Ser Val Ile Ala Leu Gly Phe Thr
                    150
                                        155
Ile Tyr Thr Met Asn Tyr Pro Phe Cys Lys Ser Arg Gln Ile Arg His
                                    170
Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Glu Asp Thr
            180
                                185
                                                    190
Ser Thr Tyr Glu Leu Met Val Tyr Leu Ala Gly Val Ser Val Leu Ile
        195
                            200
Leu Pro Leu Ala Val Ile Leu Ala Ser Tyr Val Arg Ile Leu Phe Thr
    210
                        215
Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                    230
                                        235
Cys Ser Ser His Leu Ile Val Val Gly Met Trp Tyr Gly Gly Ser Ser
                                    250
Leu Met Tyr Val Leu Pro Ser Gln Phe His Ser Pro Lys Gln Asp Asn
            260
                                265
Ile Leu Ser Ile Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
       275
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Arg Ile
                        295
                                            300
Phe Gly Lys Trp Leu Gly Pro Ala His Phe Leu Gly Ser Ser Phe
```

315

```
<210> 1841
<211> 316
<212> PRT
<213> Mus musculus
<400> 1841
Met Ala Gly Thr Asn His Thr Glu Val Ile Glu Tyr Val Leu Leu Gly
Leu Gln Asp His His Gly Leu Glu Ile Ala Leu Phe Val Leu Cys Leu
Gly Ile Tyr Cys Met Thr Leu Leu Gly Asn Ser Phe Leu Val Gly Leu
Ile Val Leu Asp Thr His Leu His Ser Pro Met Tyr Phe Phe Ile Ser
Asn Leu Ser Leu Ile Asp Ile Cys Gly Thr Ser Ser Phe Thr Pro Met
                    70
Met Leu Leu Asn Phe Leu Asp Val Gln Arg Thr Ile Ser Phe Pro Ser
                                    90
Cys Ala Leu Gln Met Tyr Leu Thr Leu Ala Leu Gly Thr Thr Glu Cys
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln
                            120
                                                 125
Pro Leu His Tyr Pro Glu Leu Met Asn Gly Pro Leu Cys Ile Gln Met
                        135
Ala Gly Ile Ser Trp Gly Thr Gly Phe Ala Asn Ser Leu Leu His Ser
                    150
                                         155
Ile Leu Val Trp His Leu Pro Phe Cys Gly His Tyr Ile Ile Asn His
                                    170
Phe Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Gly Asp Ile
                                185
                                                    190
Ser Leu Asn Ala Leu Ile Leu Thr Val Ala Thr Ala Val Leu Thr Met
Thr Pro Leu Leu Ile Cys Leu Ser Tyr Ile Phe Ile Leu Ala Ala
                        215
                                             220
Ile Leu Arg Val Pro Ser Ala Ala Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ser Ala His Leu Thr Val Val Val Ile Phe Tyr Gly Thr Ile Thr
                                    250
Phe Met Tyr Leu Lys Pro Lys Asp Gln Asp Pro Ser Val Gly Lys Ile
                                265
Ile Thr Leu Leu Tyr Ala Ile Val Ala Pro Ser Leu Asn Ala Phe Ile
                                                285
Tyr Ser Leu Arg Asn Ser Glu Val Lys Ala Ala Val Thr Ala Leu Leu
                        295
Trp Gly Gly Leu Leu Thr Arg Lys Met Ser His Phe
305
                    310
<210> 1842
<211> 321
<212> PRT
<213> Mus musculus
<400> 1842
Met Asn Thr Trp Asn Tyr Thr Lys Glu Ser Asp Phe Ile Leu Met Gly
                                    10
Leu Thr Asp Ser Lys Glu Ile Gln Leu Val Leu Thr Val Leu Phe Val
Leu Ile Tyr Leu Val Thr Val Leu Gly Asn Ala Gly Met Met Leu Ile
```

```
40
Ile Arq Leu Asp Ala Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                           60
His Leu Ser Phe Leu Asp Leu Ser Tyr Ser Thr Val Ile Thr Pro Lys
                    70
                                        75
Thr Leu Gln Asn Leu Leu Thr Ser Thr Lys Val Ile Ser Phe Ile Gly
                                    90
               8.5
Cys Phe Thr Gln Met Tyr Ala Phe Val Leu Leu Ala Ala Glu Cys
           100
                                105
                                                    110
Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
       115
                                                125
Pro Leu Gln Tyr Pro Val Ile Met Ser Thr Arg Phe Cys Ser Thr Leu
                        135
                                            140
Leu Thr Gly Ser Tyr Met Ile Gly Thr Met Asp Ser Thr Val Asn Ile
                                        155
                    150
Phe Cys Met Asn Thr Leu Tyr Phe Cys Arg Thr Lys Val Ile His His
                                    170
               165
Phe Phe Cys Asp Thr Ser Pro Ile Leu Ala Leu Ser Cys Ser Asp Thr
                                185
                                                    190
           180
Arg Asn Ile Gln Ile Ile Phe Ile Phe Ala Gly Ser Thr Leu Val
                            200
 195
                                                205
Val Ser Leu Ile Thr Ile Ser Ala Ser Tyr Val Ser Ile Leu Ser Thr
                        215
                                           220
Ile Leu Lys Ile Asn Ser Thr Ser Gly Lys His Lys Ala Phe Ser Thr
                    230
                                       235
Cys Ala Ser His Leu Leu Gly Val Thr Val Phe Tyr Gly Thr Leu Ile
               245
                                    250
Phe Thr Tyr Leu Lys Pro Ser Asn Ser Tyr Tyr Ser Gly Lys Glu Gln
           260
                                                    270
                               265
Val Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu
        275
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Ile His Arg Val
                      295
                                           300
Ile Lys Lys Gln Lys Gly Ser Arg Leu Lys Phe Arg Val Ala Leu Ser
                    310
                                        315
Asp
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1843

Met Gln Tyr Thr Asn Tyr Thr Lys Pro Thr Glu Phe Ile Phe Ile Gly Phe Thr Asp Tyr Gln Pro Ile Arg Leu Met Leu Phe Leu Val Phe Phe Ile Val Tyr Thr Leu Thr Leu Val Gly Asn Ile Gly Leu Ile Ile Leu 4.5 Val Asn Ile Asp Leu Ser Leu Gln Thr Pro Met Tyr His Phe Leu Ser Asn Leu Ser Phe Leu Asp Ile Ser Tyr Ser Thr Ala Ile Ala Pro Lys Met Leu Val Asp Phe Leu Ala Ser Lys Lys Ser Ile Ser Phe Cys Gly Cys Ala Ile Gln Met Phe Phe Ala Cys Phe Ala Asp Ala Glu Cys

```
Leu Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Ser Thr Leu Val Ser Arg Arg Val Cys Phe Ser Leu
                        135
                                            140
Val Val Leu Ala Tyr Phe Ser Gly Ser Val Thr Ser Leu Val His Val
                    150
Ser Leu Ala Phe Met Leu Pro Tyr Cys Arg Ser Asn Ile Val Asn His
                                    170
Phe Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ala Asp Thr
His Ile Asn Glu Leu Leu Phe Ala Leu Cys Gly Thr Ile Gln Thr
                            200
                                                205
Ser Thr Phe Met Val Ile Leu Ile Ser Tyr Ser Cys Ile Leu Ile Thr
                                            220
Val Leu Ser Ile Lys Ser Thr Gly Gly Arg Ser Lys Thr Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Ile Ala Val Thr Leu Phe Tyr Gly Thr Leu Leu
                                    250
Phe Met Tyr Leu Arg Pro Thr Thr Ser Tyr Ser Pro Asp Thr Asp Lys
                                265
Val Val Ala Leu Phe Tyr Thr Val Val Phe Pro Met Leu Asn Pro Ile
                            280
Ile Tyr Ser Phe Arg Asn Lys Asp Val Lys Asn Ala Leu Lys Lys Leu
                        295
Phe Asp Arg Leu Gly Ile Phe Arg
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1844

Met Glu Asn Ile Thr Glu Val Thr Glu Phe Ile Leu Met Gly Phe Thr Asp Asn Ala Asp Leu Glu Ile Leu Ser Phe Phe Leu Phe Leu Ala Ile 20 Tyr Leu Phe Thr Leu Met Gly Asn Leu Gly Leu Ile Thr Leu Val Ile Gly Asp Ser Arg Leu His Asn Pro Met Tyr Tyr Phe Leu Ser Val Leu Ser Ser Val Asp Ala Cys Tyr Ser Thr Val Ile Thr Pro Gln Met Val 70 75 Val Asp Phe Val Ser Glu Lys Lys Val Ile Ser Phe Ile Gly Cys Ala 95 Thr Gln Met Phe Leu Ala Val Thr Phe Gly Thr Thr Glu Cys Phe Leu 105 Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile His Asn Pro Leu 120 125 Met Tyr Val Val Ser Met Ser Pro Arg Val Tyr Val Pro Leu Ile Ile 140 Ala Ser Tyr Ala Gly Gly Ile Leu His Ala Val Ile His Thr Val Ala 150 155 Thr Phe Arg Leu Ser Phe Cys Gly Ser Asn Lys Ile Ser His Ile Phe 170 Cys Asp Ile Pro Pro Leu Leu Ala Ile Ser Cys Ser Asp Thr His Phe 185 Asn Gln Leu Leu Phe Tyr Cys Ala Gly Phe Ile Glu Val Val Thr

```
200
                                               205
       195
Ile Leu Ile Val Leu Leu Ser Tyr Gly Phe Ile Leu Ser Val Ile Leu
                       215
                                           220
Lys Thr Arg Ser Thr Glu Gly Lys Arg Lys Val Phe Ser Thr Cys Gly
                   230
                                       235
Ser His Leu Met Ala Val Ser Thr Phe His Gly Thr Val Leu Phe Met
                                   250
               245
Tyr Val Arg Pro Ser Asp Ser Tyr Ala Leu Glu His Asp Met Met Val
           260
                               265
Ser Ile Phe Tyr Ser Ile Val Ile Pro Met Leu Asn Pro Leu Ile Tyr
                           280
Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ile Lys Lys Val Phe Gly
                      295
Lys Arg Ile Leu Cys Gly
<210> 1845
<211> 310
<212> PRT
<213> Mus musculus
<400> 1845
Met Glu Asn Val Thr Val Ser Leu Phe Ile Leu Arg Gly Leu Thr Asp
                                   10
               5
Asn Ala Glu Leu Gln Ile Ser Leu Phe Phe Leu Phe Leu Met Ile Tyr
20
                               25
Leu Phe Thr Leu Met Gly Asn Ile Gly Leu Ile Ser Val Val Ile Gly
                           40
Asp Ser Gln Leu His Asn Pro Met Tyr Tyr Phe Leu Gly Val Leu Ser
                       55
Phe Ile Asp Thr Cys Phe Ser Thr Ile Ile Thr Pro Lys Met Leu Ile
                  70
                                       75
Asp Phe Met Ser Lys Arg Lys Val Ile Ser Phe Leu Gly Cys Val Ala
            85
                                   90
Gln Met Phe Leu Ala Val Ser Cys Gly Thr Thr Glu Cys Phe Leu Leu
       100
                              105
                                                   110
Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Tyr Asn Pro Leu Leu
                                              125
 115
                          120
Tyr Ala Val Asn Met Ser Pro Arg Val Tyr Met Ser Leu Ile Ile Ala
                      135
                                          140
Ser Asn Val Gly Gly Ile Leu His Ala Ser Ile His Thr Ala Ala Thr
                   150
                                      155
Ala Ser Leu Ser Phe Cys Asp Ser Asn Glu Ile Lys His Phe Phe Cys
                                  170
               165
                                                       175
Asp Ile Pro Pro Leu Leu Ala Ile Ser Cys Ser Asp Thr Lys Met Asn
           180
                               185
                                                   190
Glu Leu Leu Phe Ile Phe Val Ser Ser Ile Glu Val Val Thr Ile
        195
                           200
                                               205
Leu Ile Ile Ile Val Ser Tyr Ser Phe Ile Leu Phe Ala Ile Leu Lys
                       215
                                           220
Met His Ser Ala Glu Gly Arg Pro Lys Val Phe Ser Thr Cys Gly Ser
                   230
                                       235
His Leu Thr Gly Val Ser Ile Tyr Tyr Gly Thr Ile Phe Phe Met Tyr
                                   250
               245
Met Arg Pro Ser Ser Tyr Thr Leu Glu His Asp Met Ile Val Ser
           260
                               265
Thr Phe Tyr Ala Val Val Ile Pro Met Leu Asn Pro Ile Ile Tyr Ser
                           280
```

```
290
                        295
                                            300
Val Phe Met Ser Ile Arg
<210> 1846
<211> 313
<212> PRT
<213> Mus musculus
<400> 1846
Met Glu Lys Gln Asn Leu Thr Val Leu Ser Glu Phe Ile Leu Lys Gly
Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Leu Phe
Ile Ile Tyr Leu Ile Ser Ala Val Gly Asn Leu Gly Ile Ile Ile
        35
Thr Asn Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Lys
His Leu Ala Phe Thr Asp Leu Gly Tyr Ser Thr Ala Ile Gly Pro Lys
                    70
Met Leu Val Asn Phe Val Ala Glu His Asn Ser Val Ser Tyr Tyr Leu
                                    90
Cys Ala Thr Gln Leu Ala Cys Phe Leu Leu Phe Ile Thr Cys Glu Leu
            100
                                105
                                                    110
Phe Ile Leu Ser Ser Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Arg Ile Cys Trp Val Leu
                        135
                                            140
Val Ala Val Pro Tyr Ile Tyr Ser Val Phe Val Ser Leu Ile Val Thr
                    150
                                        155
Ile Arg Leu Phe Thr Leu Ser Phe Cys Gly Tyr Asn Ile Ile Asn His
                165
                                    170
                                                        175
Phe Phe Cys Asp Cys Ile Pro Leu Ile Ser Leu Leu Cys Ser Asn Thr
            180
                                185
                                                    190
His Glu Val Glu Val Ile Ile Arg Phe Phe Ala Thr Phe Asp Leu Ile
        195
                            200
Ser Ser Leu Leu Val Val Leu Val Ser Tyr Leu Phe Ile Leu Ile Thr
                        215
                                            220
Ile Leu Arg Met Lys Ser Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Ile Val Phe Tyr Gly Thr Leu Ile
                245
                                    250
Phe Met Tyr Val Gln Pro Lys Ser Ser Gln Thr Phe Glu Thr Asp Lys
                                265
Val Ser Ser Ile Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Asp Ala Ile Glu Arg Thr
                       295
Trp Glu Lys Ile Val Thr Ser Phe Ser
<210> 1847
<211> 315
<212> PRT
<213> Mus musculus
```

Leu Arg Asn Lys Asp Val Lys Lys Ala Met Lys Arg Leu Leu Ala Lys

```
<400> 1847
Met Pro Ser Leu Asn Asn Thr Ala Val Met Asp Phe Ile Leu Val Gly
1
                                    10
Leu Thr Asp Ser Pro Val Leu Gly Arg Ile Leu Phe Val Val Phe Leu
            20
                                25
Val Ile Tyr Leu Ile Thr Leu Thr Gly Asn Leu Cys Met Ile Val Leu
Ile Arg Thr Asn Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Gly
                        55
                                             60
His Leu Ser Phe Val Asp Ile Cys Tyr Ser Ser Asn Val Thr Pro Asn
                    70
                                         75
Met Leu His Gly Phe Ile Ser Asp Gln Lys Ile Ile Ser Tyr Ala Gly
                85
                                    90
Cys Phe Thr Gln Cys Leu Leu Phe Ile Ala Leu Val Ile Thr Glu Phe
            100
                                105
                                                     110
Tyr Leu Leu Ala Ser Met Ala Leu Asp Arg Tyr Val Ala Ile Cys Ser
                            120
Pro Leu His Tyr Ser Thr Arg Met Ser Lys Asn Val Cys Phe Ser Leu
                        135
                                             140
Val Ser Phe Ser Tyr Val Phe Gly Phe Leu Asn Gly Leu Ser Gln Thr
                    150
Leu Leu Thr Phe His Leu Ser Phe Cys Gly Ser His Glu Ile Asn His
                                    170
Phe Tyr Cys Ala Asp Pro Pro Leu Ile Met Leu Ala Cys Ser Asp Thr
                                185
His Val Lys Lys Met Ala Met Phe Val Val Ala Gly Phe Thr Leu Ile
        195
                            200
Ser Ser Leu Ser Ile Ile Leu Phe Ser Tyr Leu Tyr Ile Phe Ala Ala
                        215
Ile Met Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                         235
Cys Gly Ser His Leu Thr Thr Val Thr Ile Phe Tyr Gly Thr Leu Phe
                245
                                    250
Cys Met Tyr Leu Lys Pro Pro Ser Glu Arg Ser Ile Glu Glu Ser Lys
                                265
Val Ile Ala Val Phe Tyr Thr Phe Leu Ser Pro Phe Leu Asn Pro Leu
Ile Tyr Ser Leu Arg Asn Lys Asp Val Ile Asn Ala Met Lys Gln Val
                        295
Ile Lys Gly Asn Phe Cys Gln Lys Ile Leu Val
<210> 1848
<211> 318
<212> PRT
<213> Mus musculus
<400> 1848
Met Leu Ala Pro Lys Lys Met Val Arg Gly Asn Tyr Ser Met Val Thr
Glu Phe Ile Leu Leu Gly Leu Thr Asp Arg Pro Glu Leu Gln Pro Leu
Leu Phe Val Leu Phe Leu Val Ile Tyr Leu Ile Thr Val Gly Gly Asn
Leu Gly Met Met Val Leu Ile Arg Ile Asp Ser Arg Leu His Thr Pro
```

55

70

Met Tyr Tyr Phe Leu Ala Ser Leu Ser Cys Leu Asp Leu Cys Tyr Ser

```
Thr Asn Val Thr Pro Lys Met Leu Val Asn Phe Leu Ser Glu Lys Lys
Thr Ile Ser Tyr Ala Ala Cys Leu Val Gln Cys Tyr Phe Phe Ile Ala
            100
Met Val Ile Thr Glu Tyr Tyr Met Leu Ala Val Met Ala Tyr Asp Arg
                            120
                                                125
Tyr Met Ala Ile Cys Asn Pro Leu Leu Tyr Ser Ser Lys Met Ser Lys
                        135
                                            140
Gly Val Cys Val Arg Leu Ile Ala Gly Pro Tyr Ile Tyr Gly Phe Leu
                    150
                                        155
Ser Gly Leu Met Glu Thr Met Trp Thr Tyr Arg Leu Thr Phe Cys Gly
                                    170
               165
                                                        175
Ser Asn Ile Ile Asn His Phe Tyr Cys Ala Asp Pro Pro Leu Ile Arg
            180
                                185
                                                    190
Leu Ser Cys Ser Asp Thr Phe Ile Lys Glu Thr Ser Met Phe Val Val
        195
                            200
                                                205
Ala Gly Phe Asn Leu Ser Asn Ser Leu Phe Ile Ile Leu Ile Ser Tyr
                        215
                                            220
Leu Phe Ile Leu Ile Ala Ile Leu Arg Met Arg Ser Ala Glu Gly Arg
                    230
                                       235
Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu Val Ala Val Thr Val
               245
                                    250
Phe Tyr Gly Thr Leu Phe Cys Met Tyr Val Arg Pro Pro Thr Asp Lys
            260
                                265
Ser Val Glu Gln Ser Lys Ile Ile Ala Val Phe Tyr Thr Phe Val Ser
                            280
Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                       295
His Ala Phe Trp Lys Leu Val Arg Arg Asn Val Leu Ser Lys
                    310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1849

Met Thr Phe Leu Asn His Thr Ala Met Met Asp Phe Ile Leu Met Gly 10 Leu Thr Asp Ser Pro Val Leu Gly Arg Ile Leu Phe Val Val Phe Leu 20 25 Val Ile Phe Val Ile Thr Leu Ala Gly Asn Leu Phe Met Ile Val Leu 40 45 Ile Arg Thr Asn Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Gly 5.5 60 His Leu Ser Phe Val Asp Ile Cys Tyr Ser Ser Asn Val Thr Pro Asn 70 75 Met Leu His Gly Phe Ile Ser Asp Gln Lys Thr Ile Ser Tyr Ala Gly 90 Cys Phe Thr Gln Cys Leu Leu Phe Ile Ala Leu Val Ile Thr Glu Phe 105 Tyr Leu Leu Ala Ser Met Ala Leu Asp Arg Tyr Val Ala Ile Cys Ser 120 125 Pro Leu His Tyr Ser Thr Arg Met Ser Lys Asn Val Cys Val Ser Leu 135 140 Val Ala Phe Pro Tyr Val Phe Gly Phe Leu Asn Gly Leu Ser Gln Thr 150 155 Leu Leu Thr Phe His Leu Ser Phe Cys Gly Ser His Glu Ile Asn His

```
165
                                    170
Phe Tyr Cys Ala Asp Pro Pro Leu Ile Met Leu Ala Cys Ser Asp Thr
                                185
                                                    190
His Val Lys Lys Met Ala Met Phe Val Val Ala Gly Phe Thr Leu Ser
                            200
                                                205
       195
Ser Ser Leu Ala Ile Ile Leu Leu Ser Tyr Leu Phe Ile Phe Ile Ala
                        215
Ile Leu Arg Ile Arg Ser Ala Lys Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Met Thr Thr Val Thr Ile Phe Tyr Gly Thr Leu Phe
                                    250
Cys Met Tyr Leu Arg Pro Pro Ser Glu Lys Ser Val Glu Glu Ser Lys
                                265
Val Ile Ala Val Phe Tyr Thr Phe Leu Ser Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Ile Asn Ala Met Lys Gln Val
                        295
Val Lys Gly Lys Leu Leu His
<210> 1850
<211> 311
<212> PRT
<213> Mus musculus
<400> 1850
Met Asp His Met Lys Ile Asn Phe Thr Val Thr Glu Phe Val Phe Leu
Gly Leu Ser Ser Asp Pro Lys Val Gln Leu Val Leu Phe Phe Val Phe
                                25
Leu Phe Phe Tyr Met Leu Ser Val Val Gly Asn Ile Ile Ile Thr
Ile Ile Gln Ile Glu Pro Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu
                        55
Ala Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Ser Thr Asn Val Pro
                    70
Gln Met Leu Ser Asn Met Val Gly Ser Lys Lys Thr Ile Pro Phe Val
                                    90
Ser Cys Ala Thr Gln Met Tyr Phe Ser Leu Ser Phe Gly Met Ile Glu
                                105
Cys Val Leu Leu Gly Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
His Pro Leu His Tyr Thr Val Ile Met Asp Gln Asn Thr Cys Val Gln
                                            140
Leu Ala Ala Ile Ser Trp Ser Ser Ser Phe Leu Ser Ser Met Val Ile
                    150
Asn Val Leu Thr Leu Ser Leu Pro Tyr Cys Gly Pro Asn Val Leu Asn
                                    170
His Phe Phe Cys Glu Val Pro Ser Val Leu Arg Leu Ala Cys Thr Asp
           180
                                185
Thr Ser Leu Thr Glu Leu Val Val Phe Val Phe Ser Ile Ile Ile Val
                            200
Phe Ile Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Leu Leu
                        215
                                            220
Ser Val Leu Arg Met Arg Ser Ala Ser Gly Arg His Lys Ala Leu Ser
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Val Val Thr Leu Phe Tyr Gly Thr Ala
                                                        255
```

250

Ile Phe Met Tyr Met Arg Pro Gln Ser Lys Ser Ser Arg Ala Gly Gly 260 265 Lys Val Ile Ala Val Phe Tyr Thr Val Val Thr Pro Met Leu Asn Pro 280 285 Leu Ile Tyr Ser Leu Arg Asn Gln Asp Val Lys Gly Ser Leu Arg Arg 295 300 Ala Ile Thr Lys Gln Lys Thr 310 <210> 1851 <211> 319 <212> PRT <213> Mus musculus <400> 1851 Met Asp Glu Asp Asn Asn Ser Thr Val His Gln Phe Ile Leu Val Gly Leu Thr Asp Asp Pro Glu Leu Glu Val Ile Leu Phe Ala Val Phe Leu 20 Val Ile Tyr Leu Thr Thr Val Leu Gly Asn Leu Gly Leu Ile Met Leu 35 40 Ile Gln Val Ser Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Cys 55 His Leu Ala Phe Val Asp Phe Cys Tyr Thr Ser Ser Val Thr Pro Asn 70 Thr Ile Ile Asn Phe Leu Arg Asp Ile Lys Ser Ile Thr Phe Tyr Ala 90 Cys Ala Thr Gln Val Cys Cys Phe Ile Thr Phe Ala Val Cys Glu Met 105 Tyr Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Trp Asn 120 Pro Leu Leu Tyr Val Val Leu Met Pro Lys Lys Leu Cys Leu Arg Val Ile Ala Ser Thr Tyr Ile Tyr Gly Phe Thr Val Gly Leu Ala Gln Ala 150 Val Ala Thr Phe Arg Leu Ser Phe Cys Gly Ser Asn Val Ile Asn His 170 165 Phe Tyr Cys Asp Asp Val Pro Leu Val Ala Leu Ala Cys Ser Asp Thr 180 185 190 His Val Lys Glu Leu Met Leu Leu Ile Ile Ala Gly Phe Asn Thr Leu 195 200 Cys Ser Leu Val Ile Val Val Ile Ser Tyr Ile Cys Ile Leu Phe Ala 215 Ile Leu Arg Ile His Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Ser Ile Thr Ile Phe Tyr Gly Thr Ile Ile 245 250 Phe Met Tyr Leu Gln Pro Lys Ser Ser His Ser Leu Asn Thr Asp Lys 260 265 Phe Val Ser Val Phe Tyr Val Val Val Ile Pro Met Leu Asn Pro Leu 275 280 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Leu Lys Arg Phe 295 300 Thr Glu Lys Leu Ser Leu Thr Ile His Asp Ser Arg Lys Ser Glu

310

```
<212> PRT
<213> Mus musculus
<400> 1852
Met Leu Lys Lys Asn Phe Thr Thr Val Thr Glu Phe Ile Phe Leu Gly
Leu Thr Asp Arg Ala Glu Leu Gln Pro Val Leu Phe Val Val Phe Leu
            20
Leu Ile Tyr Leu Ile Thr Val Thr Gly Asn Val Ser Met Ile Phe Leu
        35
                            40
Ile Arg Ser Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ser Phe Val Asp Leu Cys Tyr Ala Thr Thr Val Ala Pro Gln
                    70
Met Leu Val Asn Phe Leu Ser Lys Arg Lys Asn Ile Ser Phe Ile Gly
                                    90
                85
Cys Ile Ile Gln Phe His Phe Phe Ile Ala Leu Val Ile Thr Asp Tyr
            100
                                105
Tyr Met Leu Ala Val Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Thr Ser Lys Met Ser Arg Arg Val Cys Leu Ser Leu
                        135
                                             140
Val Ala Thr Gln Tyr Ile Tyr Gly Phe Val Asn Gly Leu Ile Gln Thr
                    150
                                        155
Ile Leu Met Leu Arg Leu Thr Phe Cys Gly Pro Asn Glu Ile Asn His
                                    170
                165
Phe Tyr Cys Ala Asp Pro Pro Leu Met Val Leu Ala Cys Ser Asp Thr
                                185
Tyr Val Lys Lys Thr Ala Met Phe Val Val Ala Gly Ser Asn Leu Thr
                            200
        195
Cys Ser Leu Thr Ile Ile Leu Ile Ser Tyr Ile Phe Ile Phe Thr Ala
                        215
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                         235
Cys Gly Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Phe
                                    250
                245
Cys Met His Leu Arg Pro Pro Ser Glu Thr Ser Val Glu Gln Gly Lys
                                265
            260
Ile Val Ala Val Phe Tyr Ile Phe Val Ser Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asn Ala Ile Arg Lys Val
    290
Ile Gln Lys
305
<210> 1853
<211> 319
<212> PRT
<213> Mus musculus
<400> 1853
Met Ala Gln Ile Asn Cys Thr Gln Val Thr Glu Phe Ile Leu Val Gly
Leu Thr Asp Arg Lys Glu Leu Lys Met Pro Leu Phe Val Val Phe Leu
Phe Ile Tyr Leu Phe Thr Ala Ile Gly Asn Leu Gly Leu Ile Leu Val
        35
                            40
```

<211> 307

```
Ile Arg Thr Asp Ala Arg Leu Asn Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ala Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Thr Pro Lys
                    70
                                        75
                                                             80
Met Leu Gly Asn Phe Leu Tyr Ser Lys Asn Ala Ile Ser Phe Asn Ala
                                    90
Cys Ala Ala Gln Leu Gly Cys Phe Leu Thr Phe Met Val Ser Glu Cys
                                105
Leu Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Met Val Thr Met Ser Pro Gly Ile Cys Ile Gln Leu
                                            140
                        135
Val Val Val Pro Tyr Ser Tyr Ser Phe Leu Met Ala Leu Ile His Thr
                    150
                                        155
Leu Leu Thr Phe Arg Leu Ser Tyr Cys His Ser Asn Ile Ile Asn His
                                    170
Phe Tyr Cys Asp Asp Met Pro Leu Leu Arg Leu Thr Cys Ser Asp Thr
                                185
                                                    190
His Tyr Lys Gln Leu Ser Ile Leu Ala Cys Ala Gly Ile Thr Phe Ile
                            200
                                                 205
        195
Ser Ser Val Leu Ile Val Ser Val Ser Tyr Met Phe Ile Ile Ser Ala
                        215
                                            220
Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Met Met Ala Val Ser Ile Phe Tyr Gly Thr Leu Ile
                                    250
                245
Phe Met Tyr Leu Gln Pro Ser Ser Asp His Ser Leu Asp Thr Asp Lys
                                                     270
                                265
Met Ala Ser Val Phe Tyr Thr Val Ile Ile Pro Met Leu Asn Pro Leu
                                                 285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu Lys Arg Val
                        295
                                            300
Met Asp Asn Arg Asn Gln Thr Ser Ile Phe Arg Glu Leu Arg Lys
                                         315
```

```
<210> 1854
```

<400> 1854

Met Glu Lys Ser Asn His Ser Ala Arg Ile Gln Val Thr Glu Phe Ile 10 Leu Leu Gly Leu Thr Asn Asn Pro Gly Leu Lys Ala Pro Leu Phe Val 25 Ile Phe Leu Ile Ile Tyr Leu Val Thr Leu Met Gly Asn Leu Gly Met Val Ile Leu Thr His Val Asp Ser Lys Leu His Thr Pro Met Tyr Phe 55 Phe Leu Arg His Leu Ser Ile Thr Asp Leu Gly Tyr Ser Thr Val Ile 70 75 Gly Pro Lys Met Met Val Asn Phe Val Met Gln Gln Asn Ile Ile Ser 90 Tyr Thr Gly Cys Ala Val Gln Leu Thr Phe Phe Glu Ile Phe Ile Ile 100 105 Thr Glu Leu Phe Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala 120 Ile Cys Lys Pro Leu Leu Tyr Val Ile Ile Met Ala Gly Lys Val Arg

<211> 316

<212> PRT

<213> Mus musculus

```
135
                                            140
Trp Gly Leu Val Leu Val Pro Tyr Leu Tyr Ser Leu Phe Val Ser Leu
                   150
                                        155
Leu Leu Thr Val Lys Leu Phe Thr Leu Ser Phe Cys Gly Ser Asn Thr
                165
                                    170
Ile Ser Tyr Phe Tyr Cys Asp Cys Val Pro Leu Ile Ser Leu Leu Cys
                                185
                                                    190
Ser Asp Thr His Glu Leu Glu Leu Ile Ile Leu Ile Phe Ser Gly Cys
                            200
Asn Leu Leu Ser Ser Leu Leu Ile Val Leu Val Ser Tyr Met Phe Ile
                        215
                                            220
Phe Val Ala Ile Leu Arg Met Asn Ser Lys Glu Gly Arg Ser Lys Ala
                    230
                                        235
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Val Phe Tyr Gly
                245
                                    250
Thr Leu Leu Phe Ile Tyr Leu Gln Pro Lys Ser Ser His Thr Phe Glu
                                265
                                                    270
Ile Asp Lys Met Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu
        275
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Leu
                        295
                                            300
Lys Arg Thr Leu Thr Gln Gly Leu Arg Ile His Thr
                    310
<210> 1855
<211> 317
<212> PRT
<213> Mus musculus
<400> 1855
Met Val Arg Thr Met Lys Gly Ile Gln Asp Lys Asn Ala Thr Glu Val
                                    10
Thr Glu Phe Ile Leu Leu Gly Leu Ser Glu Asn Pro Asp Leu Gln Gly
                                25
Val Leu Phe Ala Leu Phe Leu Ile Ile Tyr Thr Met Thr Leu Val Gly
                            40
Asn Leu Gly Met Met Ala Leu Ile Lys Ile Asp Arg Ser Leu His Thr
                        55
Pro Met Tyr Phe Phe Leu Ser Ser Leu Ser Phe Val Asp Ala Ser Ser
                                        75
Ser Ser Thr Val Thr Pro Lys Met Leu Leu Asn Leu Val Ala Glu Asp
                                    90
Lys Ser Ile Ser Phe Asn Gly Cys Ala Thr Gln Phe Phe Phe Gly
                                105
Ser Phe Leu Gly Thr Glu Cys Phe Leu Leu Ala Met Met Ala Tyr Asp
                            120
                                                 125
Arg Tyr Ala Ala Ile Trp Asn Pro Leu Leu Tyr Pro Val Leu Met Ser
```

135

215

150

165

180

Gly Ser Ile Cys Phe Met Leu Val Ser Thr Ser Phe Leu Ala Gly Phe

Gly Asn Ala Ala Ile His Thr Gly Met Thr Phe Arg Leu Ser Phe Cys

Gly Ser Asn Lys Ile Asn His Phe Tyr Cys Asp Thr Pro Pro Leu Leu

Lys Leu Ser Cys Ser Asp Ile His Ile Asn Gly Ile Val Ile Met Ala 200

Phe Ser Ser Phe Thr Val Leu Ile Cys Val Leu Ile Val Leu Ile Ser

185

140

220

175

190

205

155

```
Tyr Leu Cys Ile Leu Ile Ala Ile Leu Lys Met Pro Ser Ala Glu Gly
225
                    230
                                        235
Arg His Lys Ala Phe Ser Thr Cys Ala Ser His Leu Met Ala Val Thr
                245
                                    250
Ile Phe Phe Gly Ser Ile Leu Phe Met Tyr Leu Arg Pro Thr Thr Ser
Tyr Ser Met Glu Gln Asp Lys Ile Val Ser Val Phe Tyr Thr Val Val
                            280
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Lys Asn Arg Asp Val
                        295
                                            300
Lys Glu Ala Val Lys Lys Ile Leu Gln Lys His Ile Leu
                    310
<210> 1856
<211> 317
<212> PRT
<213> Mus musculus
<400> 1856
Met Val Arg Ser Gly Lys Gly Ile Gln Asn Lys Asn Ala Thr Glu Val
Thr Glu Phe Ile Leu Leu Gly Leu Ser Asp Asn Pro Asp Leu Gln Gly
                                25
Val Leu Phe Ala Leu Phe Leu Ile Ile Tyr Thr Met Thr Leu Val Gly
                            40
Asn Leu Gly Met Met Ala Leu Ile Lys Ile Asp Arg Ser Leu His Thr
                        55
Pro Met Tyr Phe Phe Leu Ser Ser Leu Ser Phe Val Asp Ala Ser Tyr
                    70
Ser Ser Ser Val Thr Pro Lys Met Leu Val Asn Leu Met Ala Glu Asp
                                    90
Lys Ser Ile Ser Phe Asn Gly Cys Ala Thr Gln Phe Phe Phe Gly
                                105
Ser Phe Leu Gly Thr Glu Cys Phe Leu Leu Ala Met Met Ala Tyr Asp
                            120
Arg Tyr Ala Ala Ile Trp Asn Pro Leu Leu Tyr Pro Val Leu Met Ser
130
                        135
                                            140
```

Gly Arg Ile Cys Phe Met Leu Val Ser Thr Ser Phe Leu Ala Gly Phe 150 155 Gly Asn Ala Ala Ile His Thr Gly Met Thr Phe Arg Leu Ser Phe Cys 165 170 Gly Ser Asn Lys Ile Asn His Phe Tyr Cys Asp Thr Pro Pro Leu Leu 180 185 Lys Leu Ser Cys Ser Asp Thr His Ile Asn Gly Ile Val Ile Met Ala 200 205 Phe Ser Ser Phe Asn Val Ile Ser Cys Val Leu Ile Val Leu Ile Ser 215 210 220 Tyr Leu Cys Ile Leu Ile Ala Ile Leu Lys Met Pro Ser Ala Glu Gly 230 235 Arg His Lys Ala Phe Ser Thr Cys Ala Ser His Leu Met Ala Val Thr 250 245 Ile Phe Phe Gly Thr Ile Leu Phe Met Tyr Leu Arg Pro Thr Ser Ser 260 265 270 Tyr Ser Met Glu Gln Asp Lys Val Val Ser Val Phe Tyr Thr Val Val 280 285 Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Lys Asn Lys Asp Val 295 Lys Lys Ala Val Lys Lys Ile Leu His Asn Tyr Val Val

310 315

```
<210> 1857
<211> 310
<212> PRT
<213> Mus musculus
<400> 1857
Met Leu Asn Phe Thr Asp Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                 5
                                    10
Ser Arg Lys Glu Leu Gln Val Leu Phe Phe Val Ile Phe Leu Met Val
                                25
Tyr Ile Val Thr Met Val Gly Asn Ile Gly Met Met Ile Leu Ile Lys
Ile Ser Pro Gln Leu Ser Ser Pro Met Tyr Phe Phe Leu Ser His Leu
Ser Phe Val Asp Val Trp Phe Ser Ser Asn Val Thr Pro Lys Met Leu
                    70
                                        75
Glu Asn Leu Leu Ser Lys Thr Lys Thr Ile Ser Tyr Ala Gly Cys Leu
                85
Val Gln Cys Phe Phe Ile Ala Leu Val His Val Glu Ile Phe Ile
            100
                                105
Leu Ala Val Met Ala Phe Asp Arg Tyr Met Ala Ile Gly Lys Pro Leu
                            120
                                                125
Leu Tyr Gly Ser Lys Met Ser Arg Val Val Cys Ile Arg Leu Ile Ser
                        135
                                            140
Phe Pro Tyr Ile Tyr Gly Phe Leu Thr Ser Leu Ala Ala Thr Leu Trp
                    150
                                        155
Thr Tyr Gly Leu Tyr Phe Cys Gly Lys Thr Glu Ile Asn His Phe Tyr
                165
                                    170
                                                        175
Cys Ala Asp Pro Pro Leu Ile Lys Met Ala Cys Ala Gly Thr Phe Val
            180
                                185
                                                     190
Lys Glu Tyr Thr Met Ile Ile Leu Ala Gly Ile Asn Phe Thr Tyr Ser
        195
                            200-
Leu Ser Val Val Ile Ile Ser Tyr Leu Phe Ile Leu Ile Ala Ile Leu
                        215
                                            220
Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly
                    230
                                        235
Ser His Leu Thr Ala Val Val Ile Phe Tyr Gly Thr Leu Ile Phe Met
                245
                                    250
Tyr Leu Arg Arg Pro Thr Glu Glu Ser Val Glu Lys Gly Lys Met Val
            260
                                                    270
                                265
Ala Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Met Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Met Asp Lys Val Ile Ser
                        295
Arg Lys Gly Leu Thr Lys
<210> 1858
<211> 310
<212> PRT
<213> Mus musculus
<400> 1858
Met Leu Asn Phe Thr Asp Val Thr Glu Phe Val Leu Leu Gly Leu Thr
```

```
Tyr Ile Val Thr Met Val Gly Asn Ile Gly Met Met Ile Leu Ile Lys
Ile Ser Pro Gln Leu Ser Ser Pro Met Tyr Phe Phe Leu Ser His Leu
Ser Phe Ile Asp Val Trp Phe Ser Ser Asn Val Thr Pro Lys Met Leu
                    70
Glu Asn Leu Leu Ser Lys Thr Lys Thr Ile Ser Tyr Ala Gly Cys Leu
                                    90
Val Gln Cys Phe Phe Ile Ala Leu Val His Val Glu Ile Phe Ile
Leu Ser Val Met Ala Phe Asp Arg Tyr Met Ala Ile Gly Lys Pro Leu
                            120
Leu Tyr Gly Ser Lys Met Ser Arg Val Val Cys Ile Arg Leu Ile Ser
                        135
Phe Pro Tyr Ile Tyr Gly Phe Leu Thr Ser Leu Ala Ala Thr Leu Trp
                    150
Thr Tyr Gly Leu Tyr Phe Cys Gly Lys Thr Glu Ile Asn His Phe Tyr
                165
                                    170
Cys Ala Asp Pro Pro Leu Ile Lys Met Ala Cys Ala Gly Thr Phe Val
                                185
Lys Glu Tyr Thr Met Leu Phe Leu Ala Gly Ile Asn Phe Thr Tyr Ser
        195
                            200
Leu Ile Val Val Ile Ile Ser Tyr Leu Phe Ile Leu Ile Ala Ile Leu
                        215
Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly
                    230
Ser His Leu Thr Ala Val Gly Ile Phe Tyr Gly Thr Leu Ile Phe Met
                245
                                    250
Tyr Leu Arg Arg Pro Thr Glu Glu Ser Val Glu Gln Gly Lys Met Val
            260
                                265
Ala Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Met Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Met Asp Lys Val Ile Ala
Lys Lys Phe Leu Thr Lys
305
<210> 1859
<211> 314
<212> PRT
<213> Mus musculus
<400> 1859
Met Ala Lys Ser Asn His Ser Val Val Thr Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr Glu Asp Pro Glu Leu Gln Ile Ile Leu Phe Val Ile Leu Leu
            20
                                25
Ile Ile Tyr Leu Phe Ser Val Met Ser Asn Leu Gly Leu Val Val Leu
                            40
Ile Gln Ile Ser Pro Gln Leu Gln Ser Pro Met Tyr Phe Phe Leu Ser
His Leu Ala Phe Val Asp Phe Cys Tyr Thr Ser Cys Val Thr Pro Asn
                    70
                                        75
Ala Leu Val Asn Phe Leu Arg Glu Ile Lys Ser Ile Ser Phe Tyr Gly
```

Cys Ala Ala Gln Val Cys Phe Phe Thr Thr Phe Ser Val Cys Glu Val

Arg Arg Lys Glu Leu Gln Val Leu Phe Phe Val Ile Phe Leu Met Val

```
105
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Val Ile Leu Met Pro Arg Arg Leu Cys Ile Gln Ile
                                            140
                        135
Ala Ile Thr Thr Tyr Ile Tyr Ala Phe Val Thr Ala Leu Ile Gln Thr
                    150
                                        155
Val Thr Thr Phe Ile Leu Ser Phe Cys Asp Ser Asn Leu Val Asn His
                                    170
Phe Phe Cys Glu Asp Ile Pro Leu Met Ala Leu Ala Cys Ser Asn Thr
           180
                                185
Gln Val Lys Glu Leu Leu Leu Ser Met Ala Gly Phe Asn Val Cys
        195
                            200
Cys Ser Leu Leu Ile Val Leu Ile Ser Tyr Leu Phe Ile Val Ser Ala
                        215
Ile Leu Lys Lys His Ser Gly Glu Gly Arg Gln Lys Val Phe Ser Thr
                    230
Cys Ala Ser His Leu Ser Ser Ile Ala Ile Tyr Tyr Gly Thr Ile Ile
                245
                                    250
Phe Met Tyr Leu Gln Pro Glu Ser Ser His Ser Leu Asn Thr Asp Lys
            260
                                265
Phe Ala Ala Val Phe Tyr Val Val Val Ile Pro Met Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Thr Glu Val Lys Asn Ala Leu Lys Lys Ser
                        295
Ile Asp Asn Ile Pro Ile Asn Ile Ser Lys
                    310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1860

Met Met Asp Asn Leu Ser Ser Ala Thr Glu Phe Cys Leu Leu Gly Phe 10 Pro Gly Ser Gln Glu Leu His Tyr Ile Leu Phe Ala Ile Phe Phe Phe 25 Phe Tyr Ser Val Thr Leu Leu Gly Asn Met Val Ile Ile Ile Val 40 Cys Val Asp Lys Arg Leu Gln Ser Pro Met Tyr Phe Phe Leu Gly Asn 55 Leu Ser Leu Leu Glu Ile Leu Val Thr Thr Thr Ile Val Pro Leu Met 75 70 Leu Trp Gly Leu Leu Pro Gly Lys Gln Thr Ile Ser Leu Asn Gly 90 8.5 Cys Ile Ala Gln Leu Phe Leu Tyr Leu Ala Leu Gly Thr Thr Glu Phe 105 100 110 Ala Val Leu Gly Ala Met Ala Val Asp Arg Tyr Val Ala Val Cys Asn 120 125 Pro Leu Arg Tyr Ser Val Ile Met Asn Ser Arg Thr Cys Ile Trp Val 135 140 Val Met Val Ser Trp Met Phe Gly Phe Leu Ser Glu Ile Trp Pro Val 150 155 Tyr Ala Thr Phe Gln Phe Thr Phe Cys Lys Ser Asn Leu Leu Asp His 170 Phe Tyr Cys Asp Arg Gly Gln Leu Leu Lys Leu Ser Cys Asn Glu Thr

```
        Phe
        Leu
        Thr 195
        Glu
        Phe
        Ile
        Leu
        Phe
        Ile
        Met
        Ala
        Ile
        Phe
        Ile
        Val

        Gly
        Ser
        Leu
        Ile
        Pro
        Thr
        Ile
        Val
        Ser
        Tyr
        Thr
        Tyr
        Ile
        Ile
        Ile
        Ser
        Thr

        210
        Leu
        Lys
        Ile
        Pro
        Ser
        Ala
        Ser
        Tyr
        Thr
        Tyr
        Ile
        Ile
        Ser
        Thr

        210
        Leu
        Lys
        Ile
        Pro
        Ser
        Ala
        Ser
        Gly
        Arg
        Lys
        Lys
        Ala
        Phe
        Ser
        Thr

        225
        Phe
        Leu
        Tyr
        Phe
        Tyr
        Ala
        Fyr
        Lys
        Lys
        Ile
        Ala
        Gly
        Tyr
        Gly
        Thr
        Cys
        Leu
        Arg
        Arg
        Ile
        Arg
        Ile
        Arg
        Ile
        Ile
        Ile
        Ile
        Ile
        Ile
```

<210> 1861 <211> 317

<212> PRT <213> Mus musculus

<400> 1861

Met Ser Leu Met Glu Asn Asn Thr Lys Val Thr Glu Phe Leu Leu 1 Gly Leu Thr Asn Asp Pro Glu Leu Gln Leu Pro Leu Phe Leu Ile Phe 25 Leu Leu Ile Tyr Thr Ile Thr Leu Val Gly Asn Leu Gly Leu Ile Leu 40 Leu Ile Val Leu Asp Ser Cys Leu His Thr Pro Met Tyr Ile Phe Leu 55 Gly Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Ala Val Thr Pro 75 Ser Val Met Thr Glu Leu Leu Ile Gly Lys Lys Val Ile Ser Tyr Asn 90 Asp Cys Ala Ala Gln Thr Phe Phe Phe Val Ala Phe Cys Thr Val Glu 105 Asn Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys 120 Lys Pro Leu His Tyr Ala Ser Thr Met Thr Thr Arg Val Cys Ile Tyr 135 140 Leu Ser Ile Gly Ser Tyr Val Cys Gly Phe Leu Asn Ala Ser Ile Asn 150 155 Thr Gly Asn Thr Phe Ser Leu Phe Phe Cys Arg Tyr Asn Met Ile His 165 170 His Phe Phe Cys Asp Ile Pro Ala Val Met Val Leu Ser Cys Ser Asp 185 190 Arg Tyr Phe Ser Glu Leu Leu Val Tyr Val Val Ser Phe Ser Ile Phe Phe Ala Leu Leu Val Ile Cys Ile Ser Tyr Ile Phe Ile Phe Ile 215 Thr Ile Ala Lys Met His Ser Ser Ala Gly Tyr Gly Lys Ala Ala Pro 235 230 Thr Cys Ala Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Val 250 Ile Phe Met Tyr Leu Leu Pro Ser Ser Ser His Ser Met Asp Thr Asp 265 Gln Ile Ala Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro

```
280
                                                285
Leu Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Thr Lys
                        295
                                            300
Ile Phe Gln Val Ala Lys Gln Ser Val Met Leu Tyr Phe
                    310
<210> 1862
<211> 318
<212> PRT
<213> Mus musculus
<400> 1862
Met Met His Arg Asn Gln Thr Val Val Thr Glu Phe Phe Thr Gly
                                    10
Leu Thr Ser Ser Phe His Leu Gln Ile Val Leu Phe Leu Thr Phe Leu
Cys Val Tyr Leu Ala Thr Leu Leu Gly Asn Leu Gly Met Ile Ile Leu
       35
Ile His Leu Asp Thr Arg Leu His Ile Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Phe Val Asp Ala Cys Ser Ser Ser Val Ile Ser Pro Lys
                    70
                                        75
Met Leu Ser Asp Met Phe Val Asp Lys Lys Val Ile Ser Phe Leu Gly
                                    90
Cys Ala Ile Gln Leu Cys Leu Phe Ser Gln Phe Val Val Thr Glu Cys
                                105
Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
                                                125
Pro Leu Leu Tyr Thr Leu Ile Met Ser Gln Arg Val Cys Val Gln Leu
                        135
                                            140
Val Ile Gly Pro Tyr Ser Ile Gly Phe Ile Ser Thr Met Val His Ile
                    150
                                        155
Ile Ser Ala Phe Val Leu Pro Tyr Cys Gly Pro Asn Leu Ile Asn His
                165
                                    170
Phe Phe Cys Asp Leu Leu Pro Val Leu Ser Leu Ala Cys Ala Asn Thr
                                185
                                                    190
Gln Met Asn Lys Arg Leu Leu Phe Ile Val Ala Gly Ile Leu Gly Val
                            200
Phe Ser Gly Ile Ile Ile Leu Val Ser Tyr Val Tyr Ile Ala Ile Thr
                        215
                                            220
Ile Leu Lys Ile Ser Ser Ala Asp Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Thr Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe
                                    250
Phe Ile Tyr Val Arg Pro Ser Ser Ser Phe Ser Leu Asp Ile Asn Lys
                                265
Val Val Ser Leu Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Phe
        275
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Ile Arg Thr
   290
                        295
Phe Glu Lys Gln Phe Cys Tyr Ser Leu Gln Asp Lys Ile Leu
                    310
                                        315
<210> 1863
<211> 318
```

<212> PRT

<213> Mus musculus

```
Met Met His Arg Asn Gln Thr Val Val Thr Glu Phe Phe Thr Gly
Leu Thr Ser Ser Phe His Leu Gln Ile Val Leu Phe Leu Thr Phe Leu
Cys Val Tyr Leu Ala Thr Leu Leu Gly Asn Leu Gly Met Ile Ile Leu
Ile His Gln Asp Thr Arg Leu His Ile Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ser Phe Val Asp Ala Cys Ser Ser Ser Val Ile Ser Pro Lys
                    70
Met Leu Ser Asp Ile Phe Val Asp Lys Lys Val Ile Ser Phe Leu Gly
                                    90
Cys Ala Ile Gln Phe Cys Leu Phe Ser Gln Phe Val Val Thr Glu Cys
            100
                                105
Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Thr Leu Ile Met Ser Gln Arg Val Cys Val Gln Leu
                        135
                                            140
Val Ile Gly Pro Tyr Ser Ile Gly Leu Ile Ser Thr Val Val His Thr
                    150
                                        155
Thr Ser Ala Phe Ile Leu Pro Tyr Cys Gly Pro Asn Leu Ile Asn His
                165
                                    170
Phe Phe Cys Asp Leu Leu Pro Val Leu Ser Leu Ala Cys Ala Asp Thr
           180
                                185
                                                    190
Gln Met Asn Lys His Leu Leu Phe Ile Met Ala Gly Ile Leu Gly Val
                            200
Phe Ser Gly Ile Ile Ile Leu Val Ser Tyr Val Tyr Ile Thr Ile Thr
                        215
                                            220
Ile Leu Lys Ile Asn Ser Ala Asp Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Thr Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe
                                    250
                245
Phe Ile Tyr Val Arg Pro Ser Ser Ser Phe Ser Leu Asp Ile Asn Lys
            260
                                265
                                                    270
Val Val Ser Leu Phe Tyr Thr Ala Val Ile Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Ile Arg Thr
                        295
Phe Glu Lys Lys Phe Cys Tyr Ser Leu Gln Asp Lys Ile Leu
<210> 1864
<211> 314
<212> PRT
<213> Mus musculus
<400> 1864
Met Ala Asp Glu Asn Tyr Thr Arg Ile Thr Glu Phe Ile Phe Ile Gly
Leu Arg Tyr His Pro Asn Leu Gln Val Phe Leu Phe Leu Leu Phe Leu
Leu Phe Tyr Leu Val Thr Met Thr Gly Asn Leu Gly Met Ile Ile Leu
                            40
Ile Arg Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Phe Val Asp Ile Cys Phe Ser Ser Val Val Ala Pro Lys
```

<400> 1863

```
70
Met Leu Thr Asp Phe Phe Ala Asp Lys Lys Ala Ile Ser Phe Leu Gly
                     90
Cys Val Leu Gln Gln Trp Phe Phe Gly Phe Phe Val Ala Ile Glu Cys
                                105
            100
Leu Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Ser Val Ala Met Ser Gln Arg Leu Cys Ile Gln Leu
                        135
                                            140
Val Ile Gly Pro Tyr Ala Val Gly Phe Phe Asn Thr Met Thr His Thr
                    150
                                        155
Thr Ala Ala Phe Arg Leu Pro Phe Cys Gly Ser Asn Ile Ile Asn His
                165
                                    170
Phe Phe Cys Asp Met Ser Pro Ile Leu Ser Leu Ile Cys Ala Asp Ile
            180
                                185
Arg Ile Asn Lys Leu Leu Val Phe Ile Val Ala Gly Ala Val Leu Ile
                            200
Val Ser Ser Thr Thr Ile Ile Val Ser Tyr Phe His Ile Leu Ile Ala
                        215
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Val Thr Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe
                245
                                    250
Phe Ile Tyr Val Arg Pro Ser Ala Ile Ser Ser Leu Asp Leu Asn Lys
                                265
Val Val Ser Val Phe Tyr Thr Ala Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Met Gly Arg Thr
                        295
Val Ala Lys Ala Lys Val Phe Leu Lys Asn
<210> 1865
<211> 312
<212> PRT
<213> Mus musculus
<400> 1865
Met Asp Val Asp Asn Arg Thr Ile Leu Thr Glu Phe Ile Leu Leu Gly
                                    10
Phe Ser Ala Asp Pro His Trp Gln Leu Ile Leu Phe Gly Ile Phe Leu
                                25
```

Thr Ile Tyr Leu Met Thr Leu Leu Gly Asn Met Thr Leu Ile Ile Leu 40 4.5 Ile Arg Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly 55 Gly Leu Ser Phe Leu Asp Phe Trp Tyr Asn Ser Val Tyr Ile Pro Lys 70 75 Ile Leu Val Asn Cys Val Ser Glu Asp Lys Arg Ile Ser Leu Ala Gly 90 85 Cys Gly Ala Gln Phe Phe Phe Ser Cys Val Ala Ala Tyr Thr Glu Cys 100 105 Tyr Leu Leu Ala Ala Met Ala Tyr Asp Arg His Ala Ala Ile Cys Ser 120 Pro Leu Leu Tyr Ser Ser Ile Met Ser Thr Ser Leu Cys Ala Gly Leu 135 140 Val Gly Ala Ser Tyr Val Gly Gly Phe Leu Asn Ala Ile Ala His Thr

```
Ala Asn Thr Phe Arg Leu Arg Phe Cys Gly Lys Asn Ile Ile Asp His
                                    170
Phe Phe Cys Asp Val Leu Pro Leu Val Lys Met Ser Cys Thr Asp Thr
            180
                                                     190
Arg Val Tyr Val Lys Ile Leu Ser Ser Met Val Gly Phe Thr Val Leu
        195
                            200
                                                205
Ser Ser Ile Leu Ala Ile Leu Ile Ser Tyr Leu Asn Ile Leu Leu Ala
                        215
Ile Leu Arg Ile Arg Ser Ala Ser Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                         235
Cys Ala Ser His Leu Val Ser Val Thr Leu Phe Tyr Gly Ser Leu Leu
                                    250
Phe Met Tyr Ser Arg Pro Ser Ser Asn Tyr Ser Leu Glu Arg Asp Lys
                                265
                                                     270
Val Ala Ala Met Phe Tyr Ile Ile Ile Asn Pro Leu Leu Asn Pro Phe
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Phe Lys Lys Leu
                        295
                                            300
Met Gln Thr Ile Lys Gln Gln Thr
                    310
```

<210> 1866 <211> 320 <212> PRT

<213> Mus musculus

<400> 1866

Met Thr Arg Phe Ser Ser Val Asp Met Glu Leu Asp Asn Arg Thr Ile Leu Thr Glu Phe Ile Leu Val Gly Phe Ser Ala Asp Pro His Trp Gln 20 25 Leu Thr Leu Phe Gly Ile Phe Leu Thr Ile Tyr Leu Leu Thr Leu Ser Gly Asn Met Leu Leu Val Val Leu Ile Arg Ile Asn Ser Arg Leu His 55 Thr Pro Met Tyr Phe Phe Ile Ser Asn Leu Ser Phe Leu Asp Phe Trp Tyr Thr Ser Val Tyr Thr Pro Lys Ile Leu Ala Thr Cys Ile Ser Glu 8.5 90 Asp Lys Arg Ile Ser Leu Ala Gly Cys Gly Ala Gln Leu Phe Phe Ser 105 Cys Val Val Ala Tyr Thr Glu Cys Tyr Leu Leu Ala Ala Met Ala Tyr 120 Asp Arg His Ser Ala Ile Cys Ser Pro Leu Ile Tyr Ser Ser Ile Met 135 Ser Ser Ser Leu Cys Thr Gly Leu Val Ala Gly Cys Tyr Ile Gly Gly 150 155 Val Leu Asn Ala Ile Ala His Thr Ala Asn Thr Phe Arg Leu Thr Phe 165 170 Cys Gly Lys Asn Ile Ile Asp His Phe Phe Cys Asp Ala Pro Pro Leu 185 190 Val Lys Met Ser Cys Thr Asp Thr Arg Val Tyr Glu Lys Val Leu Leu 195 200 Gly Val Val Gly Phe Thr Val Leu Ser Ser Ile Leu Ala Ile Leu Ile 220 Ser Tyr Phe Asn Ile Leu Leu Ala Ile Leu Arg Ile Arg Ser Ala Ser 230 235 Gly Arg Arg Lys Ala Phe Ser Thr Cys Ala Ser His Leu Val Ser Val

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245
                                    250
Met Leu Phe Tyr Gly Ser Leu Leu Phe Met Tyr Ser Arg Pro Ser Ser
            260
                                265
                                                     270
Thr Tyr Ser Leu Glu Lys Asp Lys Val Ala Ala Leu Phe Tyr Thr Val
                            280
Val Asn Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp
                        295
                                            300
Val Lys Asp Ala Phe Arg Lys Ala Thr Gln Thr Ile Arg Pro His Thr
                    310
<210> 1867
<211> 305
<212> PRT
<213> Mus musculus
<400> 1867
Met Glu Gln Tyr Asn Asp Thr Val Thr Glu Phe Ile Leu Val Gly Phe
Thr Thr Asn Pro Val Met Gln Leu Val Leu Phe Val Ile Phe Leu Ala
Val Tyr Ala Leu Thr Val Leu Gly Asn Ser Thr Leu Ile Val Leu Ile
                            40
Cys Asn Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly Asn
                        55
Leu Ser Phe Leu Asp Leu Gly Leu Ser Thr Val Tyr Thr Pro Lys Ile
Leu Val Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ser Gly Cys
                                    90
Val Ala Gln Phe Phe Phe Ser Ala Gly Leu Gly Tyr Thr Glu Cys Tyr
            100
                                105
Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Lys Pro
                            120
                                                125
Leu Leu Tyr Ser Gln Ala Met Ser Leu Lys Leu Cys Ala Phe Leu Val
                        135
                                            140
Gly Val Ser Tyr Leu Gly Gly Leu Ile Asn Ser Phe Ile Ile Thr Lys
                    150
                                        155
Asp Thr Phe Ala Leu Thr Phe Cys Asn Asp Asn Val Ile Asp Asp Phe
                                    170
                165
Phe Cys Asp Ile Pro Pro Leu Val Lys Leu Ala Cys Gly Lys Lys
            180
                                185
                                                     190
Ser Phe Gln Ser Val Leu Phe Phe Leu Leu Thr Ser Asn Val Ile Ile
                            200
Pro Ile Val Phe Ile Leu Ala Thr Tyr Leu Phe Ile Ile Ala Thr Ile
                        215
Leu Arg Ile Arg Ser Thr Gln Gly Arg Leu Lys Ala Phe Ser Thr Cys
                    230
Ser Ser His Leu Ile Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr
                                    250
Ile Tyr Ala Trp Pro Arg Ser Ser Tyr Ser Leu Asp Arg Asp Lys Ile
                                265
                                                     270
Val Ser Thr Phe Tyr Thr Val Val Phe Pro Met Leu Asn Pro Leu Ile
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Ser Lys Leu Phe
                        295
                                             300
Lys
```

```
<210> 1868
<211> 311
<212> PRT
<213> Mus musculus
<400> 1868
Met Glu Arg Gly Asn His Thr Val Thr Gly Phe Ile Leu Leu Gly Phe
1
                                    10
Ser Thr Asp Pro Val Met Gln Lys Ile Leu Phe Val Met Phe Leu Gly
                                25
Val Tyr Ser Leu Thr Leu Leu Gly Asn Thr Thr Leu Ile Ile Leu Ile
                            40
Cys Asn Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly Asn
Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val Tyr Thr Pro Lys Ile
Leu Val Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ala Gly Cys
                                    90
Leu Ser Gln Phe Phe Phe Ser Ala Gly Leu Ala Tyr Ser Glu Cys Tyr
                                105
Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Thr Ala Ile Ser Asn Pro
                            120
                                                 125
Leu Leu Tyr Ala Gln Ala Met Ser Arg Arg Leu Cys Val Cys Leu Val
                        135
                                             140
Val Tyr Ser Tyr Thr Gly Gly Phe Val Asn Ala Ile Ile Leu Thr Ser
                    150
                                        155
Asn Thr Phe Thr Leu Asp Phe Cys Gly Asp Asn Val Ile Asp Asp Phe
                165
                                    170
                                                         175
Phe Cys Asp Val Pro Pro Leu Val Lys Leu Ala Cys Asp Val Arg Glu
            180
                                185
                                                    190
Ser Tyr Gln Ser Val Leu Tyr Phe Leu Leu Ala Ser Asn Val Ile Ser
        195
                            200
                                                 205
Pro Thr Leu Leu Ile Leu Thr Ser Tyr Leu Phe Ile Ile Ala Ala Ile
                        215
                                            220
Leu Arg Ile Arg Ser Thr Gln Gly Arg Leu Lys Ala Phe Ser Thr Cys
                    230
                                        235
                                                             240
Ser Ser His Leu Ile Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr
                245
                                    250
Ile Tyr Ser Arg Pro Ser Ser Ser Tyr Ser Leu Glu Arg Asp Lys Met
            260
                                265
                                                    270
Val Ser Thr Phe Tyr Thr Val Leu Phe Pro Met Leu Asn Pro Met Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Arg Lys Leu Phe
                        295
Lys Leu Ala Pro Ser Glu Val
305
<210> 1869
<211> 313
<212> PRT
<213> Mus musculus
<400> 1869
Met Glu Ile Ser Asn Gln Ser Gly Ile Ser Glu Phe Phe Leu Thr Gly
Leu Thr Tyr Ser Pro Ala Ile Glu Ser Phe Ile Phe Ser Leu Phe Leu
Ser Ile Tyr Phe Val Thr Ile Phe Gly Asn Ile Leu Ile Ile Leu Ala
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```
40
Val Arq Leu Asp Tyr His Leu His Thr Pro Met Tyr Phe Phe Ile Ala
                        55
Asn Leu Ser Phe Thr Asp Ile Cys Ile Ser Thr Thr Ile Ile Pro Lys
                    70
                                        75
Met Leu Leu Asn Ile Glu Thr Gln Asn Gln Ser Ile Thr Tyr Thr Gly
Cys Leu Ser Gln Val Cys Phe Val Leu Ile Phe Gly Gly Leu Glu Ser
           100
                                105
Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Val His
                            120
                                                125
Pro Leu Arg Tyr Thr Val Ile Met Asn Pro Cys Leu Cys Val Leu Leu
                        135
                                            140
Val Leu Leu Ser Leu Phe Ile Ser Thr Ile Asn Ala Leu Leu His Ser
                    150
                                        155
Leu Met Leu Leu Lys Leu Ser Phe Cys Lys Asp Gln Asn Ile Leu His
                                    170
                165
Phe Phe Cys Glu Leu Val Gln Val Ile Lys His Ala Cys Ser Asp Thr
                                185
                                                    190
Phe Ile Asn Thr Leu Leu Ile Tyr Thr Val Thr Ser Val Phe Ala Gly
        195
                            200
Val Pro Leu Ala Gly Ile Ile Phe Ser Tyr Ile Gln Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Ile Ser Ser Val Gln Gly Arg Asn Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ala Phe
                245
                                    250
Gly Val Tyr Met Ser Ser Ala Val Ser Asp Ser Ser Val Lys Asn Ile
                                265
Val Phe Ser Met Met Tyr Thr Val Val Pro Gln Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Glu Met Lys Gln Ala Met Arg His Leu
                        295
Leu Phe Pro Val Val Leu Ser Ser Pro
                    310
<210> 1870
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1870

Met Ser Asn Met Glu Val Glu Asn Lys Ser Val Val Leu Asp Ile Phe 10 Leu His Gly Leu Thr Asn Asp Pro Glu Leu Gln Pro Phe Ile Phe Val 25 Leu Phe Leu Ser Ile Tyr Leu Ile Thr Val Ser Gly Asn Leu Leu Ile Met Leu Ala Ile Lys Cys Asp Phe His Leu His Asn Pro Met Tyr Phe 55 Phe Leu Cys His Leu Ser Phe Asn Asp Met Tyr Leu Ile Ser Ile Thr 70 75 Val Pro Lys Met Leu Met Asn Ile Gln Thr Lys Asp Gln Arg Ile Thr 90 Phe Ala Gly Cys Leu Ser Gln Ala Cys Phe Val Val Val Cys Thr Ile 100 105 110 Phe Glu Cys Phe Leu Leu Gly Val Met Ala Tyr Asp Arg Tyr Ile Ala 115 120 125

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Ile Cys Tyr Pro Leu Arg Tyr Thr Val Leu Met Asn Pro Ser Phe Cys
                        135
Val Ile Leu Val Leu Phe Ser Leu Phe Phe Ser Ile Val Asn Gly Leu
                    150
                                        155
Leu His Ser Leu Met Val Leu Tyr Leu Ser Phe Cys Thr Asp Leu Glu
                165
                                    170
Ile Leu His Phe Phe Cys Glu Ile Ala Gln Ile Leu Lys Leu Ala Cys
                                185
Ser Asp Ser Leu Ile Asn Asn Ile Leu Ile Phe Val Thr Ala Ser Ile
                            200
Phe Ala Gly Leu Pro Leu Phe Ala Ile Ile Phe Ser Tyr Thr His Ile
                        215
Val Ser Thr Val Leu Lys Met Pro Ser Ser Glu Gly Lys Tyr Lys Ala
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
                245
                                    250
                                                        255
Thr Gly Phe Gly Val Tyr Ile Thr Ser Lys Val Ile Asp Ser Pro Lys
            260
                                265
Lys Ile Ala Val Ala Ser Val Met Tyr Ser Val Val Pro Pro Met Leu
                            280
Asn Pro Phe Val Tyr Cys Leu Arg Asn Arg Asp Met Lys Glu Ala Leu
                        295
Lys Lys Val Ile Gly Arg Thr Ala Ser Leu Leu
                    310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1871

Met Glu Val Lys Asn Lys Ser Val Val Leu Asp Ile Phe Leu His Gly 10 Leu Thr Asp Asp Ile Glu Leu Gln Pro Phe Ile Phe Gly Phe Phe Leu 25 Cys Met Tyr Leu Ile Thr Ile Phe Gly Asn Leu Leu Ile Met Leu Ala 40 45 Ile Ile Cys Asp Ser His Leu His Lys Pro Met Tyr Phe Phe Leu Cys His Leu Ala Phe Asn Asp Met Tyr Leu Ile Ser Ile Thr Val Pro Lys 70 75 Leu Leu Val Asn Val Gln Thr Gln Asp Gln Arg Ile Thr Leu Ala Gly Cys Leu Ser Gln Gly Cys Phe Val Ala Val Cys Phe Ile Phe Glu Cys 105 110 Phe Leu Leu Gly Ile Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Phe 120 125 Pro Leu Arg Tyr Thr Val Leu Ile Asn Pro Phe Phe Cys Val Ile Val 135 140 Val Leu Ile Ser Leu Phe Ile Ser Ile Val Asn Gly Leu Leu His Ser 150 155 Leu Met Val Leu His Leu Ser Phe Cys Thr Asp Leu Glu Ile Leu His 170 Phe Phe Cys Glu Ile Ala Gln Ile Leu Lys Leu Ala Cys Ser Asp Asn 180 185 Leu Ile Asn Asn Ile Leu Ile Phe Val Thr Ala Ser Ser Phe Ala Gly 200 Val Pro Leu Cys Gly Ile Ile Phe Ser Tyr Val His Ile Val Ser Thr

```
215
   210
Val Leu Lys Met Pro Ser Ser Glu Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Phe
                245
                                    250
Gly Val Tyr Ile Thr Ser Val Val Ile Asp Ser Pro Lys Glu Ile Ala
                                265
            260
Ile Ala Ser Val Met Tyr Ser Ile Val Pro Pro Met Leu Asn Pro Phe
                            280
Val Tyr Ser Leu Lys Asn Arg Asp Met Lys Glu Ala Leu Lys Lys Val
                        295
Ile Gly Arg Thr Val Ser Leu Pro
                    310
<210> 1872
<211> 317
<212> PRT
<213> Mus musculus
<400> 1872
Met Cys Lys Met Glu Val Glu Asn Lys Ser Val Val Phe Asp Ile Phe
                 5
                                    10
Leu His Gly Leu Thr Asp Asp Thr Glu Leu Gln Pro Phe Ile Phe Gly
            20
                                25
Leu Phe Leu Cys Met Tyr Leu Ile Thr Ile Phe Gly Asn Leu Leu Ile
                                                45
                            40
Ile Leu Ala Ile Ile Cys Asp Ser His Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Cys His Leu Ala Phe Asn Asp Met Tyr Leu Ile Ser Ile Thr
                                        75
                    70
Val Pro Lys Met Leu Val Asn Ile Gln Thr Gln Asp Gln Arg Ile Thr
                                    90
                8.5
Phe Ala Gly Cys Leu Ser Gln Gly Cys Phe Val Ala Val Cys Thr Ile
            100
                                105
                                                    110
Phe Glu Cys Phe Leu Leu Gly Ile Met Ala Tyr Asp Arg Phe Ile Ala
        115
                            120
                                                125
Ile Cys Tyr Pro Leu Arg Tyr Thr Val Leu Met Asn Pro Cys Phe Cys
                        135
                                            140
Val Ile Leu Thr Leu Ile Ser Leu Phe Phe Ser Ile Val Asn Gly Leu
                    150
                                        155
Leu His Ser Leu Met Val Leu His Leu Ser Phe Cys Thr Asp Leu Glu
                                    170
                165
                                                        175
Ile Leu His Phe Phe Cys Glu Ile Ala Gln Ile Leu Lys Leu Ala Cys
            180
                                185
                                                    190
Ser Asp Ser Leu Ile Asn Asn Ile Leu Ile Phe Val Thr Ser Ser Ile
        195
                            200
Phe Ala Gly Val Pro Leu Cys Gly Ile Ile Phe Ser Tyr Val His Ile
                        215
                                            220
Val Ser Thr Val Leu Lys Met Pro Ser Leu Glu Gly Lys Tyr Lys Ala
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
                                    250
                245
Thr Gly Phe Gly Val Tyr Ile Ser Ser Asn Val Ile Asp Ser Pro Lys
            260
                                                     270
                                265
Lys Ile Ala Met Ala Ser Val Met Tyr Ser Ile Val Pro Pro Met Met
                            280
Asn Pro Phe Ile Tyr Ser Met Arg Asn Arg Asn Met Lys Glu Ala Leu
```

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310
<210> 1873
<211> 295
<212> PRT
<213> Mus musculus
<400> 1873
Met Gly Leu Ser Asp Asp Leu Gln Leu Gln Pro Ile Leu Phe Gly Leu
Phe Leu Ser Met Tyr Leu Val Thr Leu Leu Gly Asn Leu Leu Ile Ile
                                25
Leu Thr Val Ser Ser Asp Ser His Leu His Ser Pro Met Tyr Phe Phe
                            40
Leu Ser Asn Leu Ser Leu Ala Asp Val Ser Phe Thr Ser Thr Thr Leu
                        55
Pro Lys Met Ile Val Asp Ile Gln Thr His Asn Arg Ala Ile Ser Tyr
                    70
Ser Gly Cys Leu Thr Gln Met Ser Phe Phe Met Leu Phe Gly Cys Leu
                85
                                    90
Asp Ser Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Val Ala Ile
            100
                                105
                                                    110
Cys His Pro Leu His Tyr Gln Phe Ile Met Asn Pro Arg Leu Cys Gly
                            120
                                                125
Leu Leu Val Phe Leu Ser Val Leu Ile Ser Leu Phe Val Ser Gln Leu
                        135
                                            140
His Asn Ser Val Val Leu Gln Leu Thr Tyr Phe Lys Ser Val Asp Ile
                    150
                                        155
Ser His Phe Phe Cys Asp Pro Ser Gln Leu Leu Asn Leu Ala Cys Ser
                165
                                    170
                                                        175
Asp Thr Phe Thr Asn Asn Ile Val Met Tyr Phe Val Gly Ala Ile Ser
            180
                                185
                                                    190
Gly Phe Leu Pro Ile Ser Gly Ile Phe Phe Ser Tyr Tyr Lys Ile Val
                            200
Ser Ser Ile Leu Arg Met Pro Ser Pro Gly Gly Lys Tyr Lys Ala Phe
                        215
                                            220
Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr
                    230
                                        235
Gly Leu Gly Val Tyr Leu Ser Ser Ala Val Ser Leu Ser Pro Arg Lys
                245
                                    250
Gly Ala Val Ala Ser Ile Val Tyr Thr Val Val Thr Pro Met Leu Asn
            260
                                265
                                                    270
Pro Phe Ile Tyr Ser Leu Arg Asn Gln Asp Ile Lys Arg Ala Met Trp
                            280
Arg Leu Leu Arg Lys Thr Val
    290
<210> 1874
<211> 306
<212> PRT
<213> Mus musculus
<400> 1874
Met Glu Pro Tyr Asn Leu Thr Gly Ala Leu Glu Phe Leu Leu Gly
Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Phe Ala Leu Phe Leu
```

Lys Lys Val Ile Gly Arg Lys Leu Leu Phe Ser Asp Val

```
Ile Ser Ser Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Tyr
                        55
Asn Leu Ser Leu Ser Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys
                    70
                                        75
Met Leu Ile Asn Met Gln Thr His Asn Lys Ser Ile Thr Tyr Ala Ala
                                    90
               8.5
Cys Leu Thr Gln Val Ser Phe Phe Thr Leu Phe Gly Cys Met Asp Ser
                                105
           100
Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Trp Val Ala Ile Cys Arg
                            120
                                                125
Pro Leu Tyr Tyr Gln Val Ile Leu Asn Pro Gly Leu Cys Arg Arg Leu
                        135
                                            140
Val Leu Met Leu Phe Phe Ile Ser Tyr Met Asn Ser Leu Val His Tyr
                    150
                                        155
Phe Ile Val Ser Gln Leu Lys Phe Cys Thr Asn Met Glu Ile Pro His
                165
                                    170
Phe Phe Cys Asp Ile Pro Glu Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                                185
                                                     190
Ser Ile Asn Asn Leu Phe Arg Phe Leu Leu Ser Ile Ile Phe Gly Phe
        195
                            200
Leu Pro Val Ser Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Ile Ser Ser
                        215
                                            220
Ile Ile Arg Val Pro Ser Leu Leu Gly Lys Tyr Lys Ala Phe Ser Thr
                                        235
                    230
Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr Gly Leu
                                    250
                245
Glu Ala Tyr Leu Ser Ser Thr Ile Ser Arg Ser Thr Arg Glu Asn Met
                                265
                                                     270
            260
Leu Ala Ser Val Ile Tyr Thr Met Arg Val Pro Met Ile Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Ala Met Lys Lys Ala Leu Gln Lys Ile
   290
                        295
Phe Ser
305
<210> 1875
<211> 319
<212> PRT
<213> Mus musculus
<400> 1875
Met Phe Ile Phe Lys Ser Cys Ser Asn Asn Ile Glu Leu Gln Asn Leu
1
                                    10
Thr Leu Val Ser Glu Phe His Leu Met Arg Ile Ser Asp Asp Pro Glu
                                25
            20
Leu Gln Pro Ile Leu Phe Gly Leu Phe Leu Ser Met Tyr Leu Val Thr
                            40
                                                 45
Val Leu Gly Asn Leu Ile Ile Ile Leu Ala Val Asn Ser Asp Ser Asn
Leu His Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu Ser Leu Ala Asp
                    70
Ile Cys Phe Ile Ser Thr Thr Val Pro Lys Met Ile Val Asn Ile Gln
                                    90
Thr His Ser Lys Glu Ile Ile Tyr Val Gly Cys Leu Thr Gln Met Ser
```

Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala

40

```
Phe Leu Ile Leu Phe Gly Cys Met Asp Gly Leu Leu Thr Val Met
Ala Tyr Asp Arg Phe Val Ala Val Cys His Pro Leu His Tyr Ser Leu
                        135
Ile Met Asn Pro Arg Leu Cys Gly Ser Leu Val Cys Leu Ser Leu Leu
Ile Ser Leu Val Asp Ser Gln Ala His Asn Leu Ile Ala Leu Gln Ile
                                    170
Ile Tyr Phe Lys Asp Val Lys Ile Ser Asn Phe Phe Cys Asp Pro Ala
                                185
Gln Leu Leu Asn Leu Ala Cys Phe Asn Thr Phe Ile Asn Asn Ile Val
                            200
Met Tyr Phe Val Gly Ala Ile Ser Gly Leu Leu Pro Ile Ser Gly Ile
                        215
Phe Phe Ser Tyr Tyr Lys Ile Val Phe Ser Ile Leu Lys Ile Pro Ser
                    230
Lys Gly Gly Arg Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser
                                    250
Val Val Cys Leu Phe Tyr Gly Thr Ala Ile Gly Val Tyr Leu Gly Ser
                                265
Ala Val Ser His Ser Pro Arg Ser Thr Ala Val Ala Ser Leu Ile Tyr
                            280
Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn
                        295
Lys Asp Ile Lys Arg Ala Val Lys Arg Leu His Arg Arg Met Leu
305
                    310
```

<210> 1876

<211> 295

<212> PRT

<213> Mus musculus

<400> 1876

Met Ser Leu Ser Glu Asn Val Glu Leu Gln Pro Phe Leu Leu Val Leu Phe Leu Ser Phe Tyr Met Val Thr Val Leu Gly Asn Leu Leu Ile Ile 25 Leu Ala Val Cys Ser Asp Phe His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Trp Ser Asp Ile Cys Leu Ile Ser Thr Ile Val Pro Arg Met Ile Trp Asp Ile Gly Thr Gln Ser Arg Val Ile Ser Tyr 70 75 Val Ser Cys Leu Thr Gln Met Ser Met Phe Ile Val Phe Gly Cys Met 85 Asp Ser Met Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile 105 Cys His Pro Leu His Tyr Lys Ile Ile Met Asn Pro Asn Leu Cys Ala 115 120 125 Phe Leu Leu Ala Ser Val Leu Ala Ser Leu Val Asp Ser Gln Val 135 140 His Asn Leu Ile Val Leu Gln Phe Thr Tyr Phe Asn Asp Met Glu Ile 150 Ser Asn Phe Phe Cys Asp Pro Ser Gln Leu Leu Asn His Asn Cys Ser 165 170 175 Glu Met Phe Thr Lys Asn Ile Val Ile His Phe Ile Gly Val Phe Phe 185 Gly Leu Phe Ser Thr Thr Gly Ile Ile Phe Ser Tyr Tyr Lys Ile Ile

```
195
                            200
Ser Ser Ile Leu Arg Ile Pro Thr Lys Asp Gly Lys Tyr Lys Ala Phe
                        215
                                             220
Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr
                    230
                                        235
Ser Ile Gly Val Tyr Ile Gly Ser Thr Ala Ser Asn Ser Pro Lys Asn
                                    250
Cys Ala Ile Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn
                                265
Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Thr Ala Leu Trp
                            280
Gln Leu Gln Arg Arg Ala Met
    290
<210> 1877
<211> 309
<212> PRT
<213> Mus musculus
<400> 1877
Met Met Lys Leu Lys Met Glu Asn Ile Thr Tyr Val Ser Gln Phe Tyr
Leu Leu Arg Val Ser Asp Asp Pro Glu Leu Gln Pro Phe Leu Ser Gly
                                25
Leu Phe Leu Ser Met Tyr Leu Ile Ser Val Leu Gly Asn Leu Ile Ile
Ile Leu Ile Val Ser Ser Phe Ser His Leu His Thr Pro Met Tyr Phe
Phe Leu Ser Ile Leu Ser Leu Ala Asp Ile Gly Phe Ile Ser Thr Thr
                                        75
                    70
Val Pro Asn Met Ile Ala Glu Leu Gln Ile His Ser Pro Val Ile Ser
                                    90
Tyr Val Gly Cys Leu Thr Gln Met Ser Leu Phe Ile Ile Phe Ala Cys
            100
                                105
Met Asp Ser Met Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala
                            120
Ile Cys His Pro Leu Arg Tyr Ala Ile Ile Met Asn Pro Cys Arg Cys
    130
                        135
Gly Ile Leu Val Leu Met Ser Phe Ser Ala Ser Leu Phe Glu Ser Leu
145
                    150
Leu His Asn Leu Val Ala Leu Gln Leu Lys Cys Phe Lys Asp Val Ala
                                    170
Ile Ala Asn Phe Phe Cys His Pro Ser Gln Leu Leu Asn Leu Ser Cys
                                185
Asn Asn Thr Phe Asn Asn Asn Ile Leu Met Tyr Val Ile Gly Val Ile
                            200
Leu Gly Val Phe Pro Leu Ser Gly Ile Leu Ile Ser Tyr Phe Lys Ile
    210
                        215
Ile Ser Ser Ile Leu Arg Ile Thr Ser Ser Ser Gly Arg Tyr Lys Ala
                    230
                                         235
Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly
                245
                                    250
Thr Gly Leu Gly Glu Tyr Phe Gly Ser Leu Leu Ser His Ser Ser Gly
            260
                                265
                                                     270
Asn Asn Val Val Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu
                            280
                                                 285
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Gln Asp Ile Ser Asp Ser Leu
                                             300
                        295
```

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<210> 1878
<211> 312
<212> PRT
<213> Mus musculus
<400> 1878
Met Ile Asn Asn Asp Val Glu Asn Leu Lys Asp Val Leu Glu Phe His
Leu Met Ala Leu Ser Glu Asp Pro Glu Leu Gln Leu Leu Leu Phe Gly
                                25
Leu Phe Leu Ser Val Tyr Leu Val Thr Val Leu Gly Asn Leu Leu Ile
Ile Leu Ile Ile Phe Asp Ser Asn Leu His Asn Pro Met Tyr Phe
                        55
Phe Leu Ser Asn Leu Ser Leu Ile Asp Ile Leu Phe Ile Ser Thr Thr
Ile Pro Lys Met Ile Val Gly Ile Lys Met His Ser Arg Val Ile Ser
                                    90
Tyr Ala Gly Cys Leu Thr Gln Met Ser Leu Phe Leu Phe Phe Val Cys
            100
                                105
                                                    110
Met Asp Asp Met Ile Leu Asn Val Met Ala Tyr Asp Arg Phe Val Ala
       115
                            120
                                                125
Ile Cys His Pro Leu His Tyr Thr Val Leu Met Asn Pro Gln Val Cys
                        135
                                            140
Val Ile Leu Ile Leu Ser Phe Ser Val Ser Val Phe Asp Ser Gln
                    150
                                        155
Leu His Asn Leu Ile Ala Leu Gln Asp Thr Cys Phe Arg Asp Val Glu
                165
                                    170
                                                        175
Ile Ala Asn Phe Phe Cys His Pro Ser Gln Leu Leu Asn Leu Ala Cys
            180
                                185
                                                    190
Thr Asn Thr Leu Ser Ser Asn Ile Val Ile Tyr Phe Ile Gly Val Ile
       195
                            200
Leu Gly Ile Phe Pro Val Leu Gly Ile Ile Leu Ser Tyr Cys Lys Ile
                        215
                                            220
Val Phe Ser Ile Leu Lys Ile Pro Ser Ser Ser Gly Lys Tyr Lys Ala
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Leu Val Val Cys Leu Phe Tyr Gly
                245
                                    250
                                                        255
Thr Gly Ile Gly Val Tyr Leu Gly Ser Ala Val Ser His Ser Pro Arg
            260
                                265
                                                    270
Lys Asn Ala Val Ala Ser Leu Met Tyr Thr Ala Val Ser Pro Met Leu
                            280
Asn Pro Phe Ile Tyr Thr Leu Arg Asn Arg Asp Ile Ser Asn Ala Leu
                        295
Lys Arg Phe His Ser Arg Phe Ser
                    310
<210> 1879
<211> 295
<212> PRT
<213> Mus musculus
<400> 1879
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Met Ser Leu Ser Glu Asn Val Glu Val Gln Pro Phe Leu Leu Val Leu

Lys Arg Leu His Phe

```
Phe Leu Ser Phe Tyr Met Val Thr Val Leu Gly Asn Leu Leu Ile Ile
                                25
Leu Ala Val Cys Ser Asp Phe His Leu His Thr Pro Met Tyr Phe Phe
Leu Ser Asn Leu Ser Trp Ser Asp Ile Cys Leu Ile Ser Thr Ile Val
                        55
Pro Arg Met Ile Trp Asp Ile Gly Thr Gln Ser Arg Val Ile Ser Tyr
                    70
Val Ser Cys Leu Thr Gln Met Ser Met Phe Ile Leu Phe Ala Cys Met
                                    90
Asp Ser Met Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile
Cys His Pro Leu His Tyr Lys Ile Ile Met Asn Pro Asn Leu Cys Ala
        115
                            120
                                                 125
Phe Leu Leu Ala Ser Val Leu Ala Ser Leu Val Asp Ser Gln Val
                        135
His Asn Leu Ile Val Leu Gln Phe Thr His Phe Ser Gly Met Glu Ile
                    150
                                        155
Ser Asn Phe Tyr Cys Asp Pro Ser Gln Leu Leu Asn Leu Asn Cys Ser
                165
                                    170
Glu Met Phe Thr Lys Ser Ile Val Ile His Phe Ile Gly Val Phe Phe
            180
                                185
                                                    190
Gly Leu Phe Ser Thr Thr Gly Ile Ile Ser Ser Tyr Tyr Lys Ile Ile
                            200
Ser Ser Ile Leu Arg Ile Pro Ser Lys Asp Gly Lys Tyr Lys Ala Phe
                        215
                                            220
Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr
                    230
                                        235
Ala Thr Ala Val Tyr Ile Gly Ser Thr Ser Ser Tyr Ser Pro Glu Asn
                                    250
                245
Cys Ala Val Ala Ser Leu Met Tyr Thr Val Val Ile Pro Met Leu Asn
                                265
                                                    270
            260
Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Ile Ala Leu Arg
                            280
Lys Leu Gln Arg Arg Ala Ile
    290
<210> 1880
<211> 311
<212> PRT
<213> Mus musculus
<400> 1880
Met Lys Asn Arg Thr Ser Val Ser Glu Phe Ile Leu Leu Gly Leu Thr
Ser Asp Pro Lys Leu Asn Ile Leu Ile Phe Ile Phe Leu Phe Ile Thr
            20
                                25
Tyr Ile Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu
Ile Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
Ser Phe Leu Glu Ile Ser Phe Thr Thr Val Ser Ile Pro Arg Phe Leu
                    70
Val Ser Ile Val Thr Gly Asp Met Thr Ile Ser Tyr Asn Ser Cys Met
                                    90
                                                         95
Ala Gln Val Phe Phe Ile Leu Leu Gly Ser Thr Glu Phe Phe Leu
                                105
```

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Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Thr Thr Ile Met Asn Ser Arg Val Cys Met Gln Leu Ile Val
                        135
Ser Ser Trp Leu Ala Gly Phe Leu Ile Ile Phe Pro Pro Val Ile Met
                    150
Gly Leu Gln Leu Asp Phe Cys Asp Ser Asn Ile Ile Asp His Phe Thr
               165
                                    170
Cys Asp Ser Ser Pro Leu Leu Ile Ser Cys Thr Asp Thr Ala Phe
           180
                                185
                                                    190
Leu Glu Leu Leu Ala Phe Phe Leu Ala Val Phe Thr Leu Met Val Thr
       195
                            200
Leu Thr Leu Val Ile Leu Ser Tyr Ser Phe Ile Leu Arg Thr Ile Leu
                        215
                                            220
Arg Ile Pro Ser Ala Glu Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Val Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
               245
                                    250
Tyr Val Lys Thr Ser Ala Lys Glu Gly Val Ala Leu Thr Lys Gly Ile
           260
                                265
                                                    270
Ala Val Leu Asn Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                               285
Ser Leu Arg Asn Lys Gln Val Lys Glu Ser Phe Arg Asn Leu Ile Lys
                       295
Lys Cys Ile Ser Asn Lys Ile
```

<210> 1881

<211> 319

<212> PRT

<213> Mus musculus

<400> 1881

Met Lys Asn Gln Ser Val Glu Ile Val Phe Ile Leu Leu Gly Leu Thr 5 10 Asp Asp Pro Gln Leu Gln Ile Leu Ile Phe Leu Phe Met Phe Phe Asn 25 Tyr Ile Leu Ser Leu Ile Gly Asn Leu Ile Ile Ile Phe Leu Thr Leu 40 Leu Asp Leu Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Met Ala Phe Thr Ser Ser Cys Ile Pro Arg Phe Leu 70 75 Met Ser Ile Leu Thr Gly Asp Lys Thr Ile Ser Tyr Gly Ser Cys Leu 90 Thr Gln Leu Phe Phe Phe Leu Leu Leu Ile Thr Glu Phe Tyr Leu 100 105 110 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu 120 125 His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Leu Leu Val Leu 135 140 Ser Ser Trp Val Thr Gly Phe Leu Ser Ile Phe Pro Pro Leu Met Leu 150 155 Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Leu Ile Asp His Phe Leu 165 170 Cys Asp Thr Ser Pro Val Leu Gln Leu Ser Cys Thr Asp Thr Arg Phe Ile Glu Trp Met Ala Phe Val Ile Ala Ile Met Thr Leu Ile Ile Thr

```
200
Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu
                        215
Lys Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
Ser His Met Val Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met
                                     250
Tyr Ile Lys Thr Ser Ala Lys Glu Arg Val Ser Leu Asn Lys Gly Val
                                 265
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
        275
                             280
Thr Leu Arg Asn Gln Gln Val Lys Asp Ala Phe Lys Gln Val Leu Gln
                        295
Arg Leu Cys His Ser Gln Asn Ser Glu Leu Arg Phe Arg His Gln
                    310
<210> 1882
<211> 308
<212> PRT
<213> Mus musculus
<400> 1882
Met Lys Asn Tyr Thr Ile Ile Thr Glu Phe Val Leu Leu Gly Ile Ser
                                     10
Gly Asn Arg Glu Leu Gln Val Val Ile Phe Val Phe Leu Leu Ile Thr
            20
Tyr Ile Val Ser Ile Thr Gly Asn Leu Thr Ile Ile Leu Leu Thr Leu
Leu Asp Ser His Leu Lys Thr Pro Met Tyr Tyr Phe Leu Arg Asn Phe
Ser Phe Leu Glu Ile Met Phe Thr Ser Val Ser Ile Pro Arg Phe Leu
                                         7.5
Ala Ser Ile Ile Thr Gln Val Lys Thr Ile Ser Tyr Asn Asn Cys Phe
                                     90
Ala Gln Leu Phe Phe Phe Ile Phe Met Gly Val Thr Glu Phe Phe Leu
            100
                                 105
                                                     110
Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
                                                 125
His Tyr Thr Leu Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu
    130
                                             140
Thr Ser Trp Leu Ala Gly Phe Leu Thr Ile Phe Pro Pro Leu Met Leu
                    150
                                         155
Val Leu Lys Leu Asp Phe Cys Ala Ser Asn Val Ile Asp His Phe Cys
                165
                                     170
Cys Asp Tyr Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Trp Leu
            180
                                 185
Leu Glu Val Ile Gly Phe Tyr Val Ala Leu Val Thr Leu Leu Phe Thr
        195
                            200
Leu Ala Leu Val Ile Leu Ser Tyr Met Tyr Ile Phe Arg Thr Ile Leu
                        215
Arg Ile Pro Ser Ala Asn Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                         235
Ser His Met Ile Val Ile Ser Met Ser Tyr Gly Ser Cys Ile Phe Ile
                                     250
Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr Lys Thr Val
            2.60
                                265
                                                     270
Ala Ile Leu Ser Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr
```

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295
Lys Val Val Phe
305
<210> 1883
<211> 313
<212> PRT
<213> Mus musculus
<400> 1883
Met Lys Asn Gln Ser Val Glu Ile Val Phe Ile Leu Leu Gly Leu Thr
Asp Asp Pro Gln Leu Gln Ile Leu Ile Phe Leu Phe Met Phe Phe Asn
Tyr Ile Leu Ser Leu Met Gly Asn Leu Val Ile Ile Phe Leu Thr Leu
Leu Asp Leu Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
Ser Phe Leu Glu Ile Ala Phe Thr Thr Ala Cys Ile Pro Arg Phe Leu
                                        75
Met Ser Ile Leu Thr Gly Asp Lys Thr Ile Thr Tyr Asn Ala Cys Val
                                    90
Ala Gln Leu Phe Phe Phe Leu Leu Leu Ile Thr Glu Phe Tyr Leu
                                105
                                                    110
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                            120
                                                125
His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Ile Leu Val Leu
    130
                        135
                                            140
Ser Ser Trp Met Thr Gly Phe Leu Ser Ile Phe Pro Pro Leu Met Leu
                    150
                                        155
Gly Leu Lys Leu Glu Phe Cys Ala Ser Lys Thr Val Asp His Phe Leu
                                    170
                                                         175
Cys Asp Thr Ser Pro Val Leu Gln Leu Ser Cys Thr Asp Thr Arg Phe
                                185
                                                    190
Ile Glu Trp Met Ala Phe Val Ile Ala Ile Met Thr Leu Ile Ile Thr
        195
                            200
Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu
                        215
                                            220
Lys Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
Ser His Met Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met
                                    250
Tyr Ile Lys Thr Ser Ala Lys Glu Arg Val Ser Leu Asn Lys Gly Val
            260
                                265
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Gln Gln Val Lys Asp Ala Phe Lys Gln Val Leu Gln
                        295
                                            300
Arg Leu Cys His Tyr Gln Thr Val Asn
305
                    310
<210> 1884
<211> 319
<212> PRT
<213> Mus musculus
```

Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Leu Ile His

```
<400> 1884
Met Lys Asn Gln Ser Leu Lys Ile Glu Phe Ile Leu Leu Gly Leu Thr
Asp Asp Pro Gln Leu Gln Ile Pro Ile Phe Leu Phe Leu Phe Asn
                                25
Tyr Ile Leu Ser Leu Met Gly Asn Tyr Met Ile Ile Phe Leu Thr Leu
Leu Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
Ser Phe Leu Glu Ile Ala Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                    70
                                        75
Ile Ser Ile Leu Ser Gly Asp Arg Thr Ile Ser Tyr Asn Ala Cys Ala
Ala Gln Leu Phe Phe Phe Leu Leu Gly Ser Thr Glu Phe Tyr Leu
            100
                                105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                            120
                                                 125
His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Gln Leu Val Leu
    130
Ser Ser Trp Val Thr Gly Phe Leu Val Val Phe Pro Gly Leu Leu Leu
                    150
Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Thr Ile Asp His Phe Leu
                165
                                    170
Cys Asp Ser Ser Pro Leu Leu Gln Leu Ser Cys Thr Asp Thr His Phe
            180
                                185
                                                    190
Ile Glu Leu Leu Asp Phe Ala Leu Ala Val Met Thr Leu Val Ile Thr
                            200
                                                 205
Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu
                        215
Lys Phe Pro Ser Ala Gln Gln Arg Arg Lys Ala Phe Ser Thr Cys Thr
                    230
Ser His Met Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met
                                    250
Tyr Met Lys Thr Ser Ala Lys Glu Arg Val Thr Leu Asn Lys Gly Val
                                265
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
        275
                            280
Thr Leu Arg Asn Gln Gln Val Lys Glu Ala Phe Lys His Val Leu His
                        295
                                             300
Arg Phe Cys Ser Leu Gln Asn Ser Glu Thr Arg Phe Arg His Lys
305
                    310
<210> 1885
<211> 311
<212> PRT
<213> Mus musculus
<400> 1885
Met Asn His Thr Glu Ile Thr Glu Phe Ile Leu Leu Gly Leu Ser Asp
                                    10
Asp Pro Asp Leu Gln Ile Val Ile Phe Leu Phe Leu Leu Ile Thr Tyr
            20
Met Leu Ser Val Ile Gly Asn Leu Thr Ile Ile Val Leu Thr Phe Ile
        35
                            40
Asp Thr His Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe Ala
```

Phe Leu Glu Val Ser Phe Thr Ser Val Cys Ile Pro Arg Phe Leu Gly

```
Ser Ile Val Thr Arg Asn Lys Thr Ile Ser Tyr Asn Asn Cys Ala Ala
Gln Leu Phe Phe Ile Phe Met Gly Val Cys Glu Phe Tyr Ile Leu
            100
                                105
                                                    110
Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
                                                125
Tyr Thr Thr Ile Met Asn Arg Lys Leu Cys Thr Leu Phe Val Leu Cys
                        135
                                            140
Ala Trp Leu Ala Gly Phe Leu Thr Val Phe Pro Pro Leu Met Leu Leu
                    150
                                        155
Leu Gln Gln Asp Tyr Cys Ala Ser Asn Val Ile Asp His Phe Ala Cys
                165
                                    170
                                                        175
Asp Phe Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Leu Phe Leu
                                185
                                                    190
Glu Val Ile Gly Phe Tyr Val Ala Leu Val Ala Leu Leu Phe Thr Leu
        195
                            200
Ala Leu Val Ile Leu Ser Tyr Met Tyr Ile Ile Arg Thr Ile Leu Arg
                        215
                                            220
Ile Pro Ser Thr Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                    230
                                        235
His Met Ile Val Ile Ser Leu Ser Tyr Gly Ser Cys Ile Phe Met Tyr
                                    250
                                                        255
Ala Asn Pro Ser Ala Lys Glu Lys Ala Ser Leu Thr Lys Gly Val Ala
                                265
                                                    270
Ile Leu Asn Thr Ser Val Val Pro Met Leu Asn Pro Phe Ile Tyr Thr
                            280
Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Gly Ala Val His Lys
   290
                        295
                                            300
Leu Val Phe Ser Val Ser Lys
```

```
<210> 1886
```

<400> 1886

Met 1	Lys	Asn	His	Thr 5	Arg	Val	Thr	Val	Phe 10	Ile	Ile	Ala	Gly	Leu 15	Thr
Asp	Asp	Pro	Gln 20	Trp	Lys	Val	Val	Leu 25	Phe	Ile	Phe	Leu	Leu 30	Leu	Thr
Tyr	Leu	Leu 35	Ser	Ile	Thr	Gly	Asn 40	Leu	Ala	Ile	Ile	Thr 45	Leu	Thr	Leu
Val	Asp 50	Thr	His	Leu	Lys	Thr 55	Pro	Met	Tyr	Phe	Phe 60	Leu	Arg	Asn	Phe
Ser 65	Phe	Leu	Glu	Phe	Ser 70	Tyr	Thr	Thr	Thr	Cys 75	Ile	Pro	Lys	Leu	Leu 80
Val	Thr	Met	Ala	Thr 85	Gly	Asp	Lys	Thr	Ile 90	Ser	Tyr	Gly	Asn	Cys 95	Leu
Thr	Gln	Val	Phe 100	Phe	Ala	Phe	Leu	Phe 105	Gly	Ala	Ser	Glu	Phe 110	Tyr	Leu
Leu	Ala	Ala 115	Met	Ser	Tyr	Asp	Arg 120	Tyr	Val	Ala	Ile	Cys 125	Lys	Pro	Leu
His	Tyr 130	Met	Thr	Ile	Met	Asn 135	Asn	Lys	Val	Cys	Val 140	Gln	Leu	Val	Leu
Ser 145	Cys	Trp	Leu	Ala	Gly 150	Phe	Phe	Val	Ile	Phe 155	Pro	Pro	Leu	Leu	Leu 160
Gly	Leu	Asn	Leu	Asp	Phe	Cys	Ala	Ser	Asn	Ile	Val	Asp	His	Phe	Tyr

<211> 312

<212> PRT

<213> Mus musculus

```
165
                                    170
Cys Asp Thr Thr Pro Leu Leu Gln Leu Ser Cys Thr Asp Thr Gln Leu
                                185
                                                    190
Leu Glu Thr Met Gly Phe Val Ser Ala Leu Val Thr Leu Leu Thr
                            200
                                                205
Leu Val Met Val Ile Val Ser Tyr Ile Tyr Ile Ala Ile Thr Ile Leu
                        215
                                             220
Lys Ile Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Ile Ser Leu Ser Tyr Gly Ser Cys Ile Phe Met
                                    250
Tyr Val Lys Pro Ser Val Lys Gln Arg Val Ser Ile Ser Lys Gly Ile
                                265
                                                     270
Ser Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
Thr Leu Arg Asn Gln Gln Val Lys Lys Ala Phe Ile Asn Thr Val His
Arg Ile Val Ser Phe Ser Lys Lys
                    310
<210> 1887
<211> 312
<212> PRT
<213> Mus musculus
<400> 1887
Met Arg Asn His Thr Glu Thr Thr Glu Phe Ile Leu Leu Gly Leu Ser
                                    10
Asp Asp Pro Lys Leu Gln Val Val Ile Phe Val Phe Leu Phe Ile Thr
                                25
Tyr Thr Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu
Leu Asp Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                        55
Ala Thr Leu Glu Val Ser Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                                        75
Gly Thr Ile Ile Ser Gly Asp Lys Thr Ile Ser Phe Asn Asn Cys Ile
Ala Gln Leu Phe Phe Leu Ile Leu Phe Gly Val Thr Glu Phe Tyr Leu
            100
                                105
                                                    110
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu
        115
                            120
                                                125
His Tyr Leu Thr Ile Met Ser Gln Lys Val Cys Lys Met Leu Val Phe
                        135
                                            140
Ala Ser Trp Leu Val Ser Phe Leu Ile Ile Phe Pro Ala Leu Met Leu
                    150
                                        155
Leu Leu Gln Leu Asp Tyr Cys Val Ser Asn Ile Ile Asp His Tyr Thr
                                    170
                                                        175
Cys Asp Tyr Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Lys Phe
                                185
                                                    190
Leu Glu Lys Met Gly Phe Ser Cys Ala Val Phe Thr Leu Met Phe Thr
        195
                            200
Leu Ala Leu Val Phe Trp Ser Tyr Thr Tyr Ile Ile Arg Thr Ile Val
                        215
Lys Ile Pro Ser Ala Ser Gln Arg Ser Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                                    250
```

Tyr Ile Lys Pro Ser Ala Ala Asp Arg Ala Ser Leu Thr Lys Gly Val 260 265 270

Ala Ile Leu Asn Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr 275 280 285

Ser Leu Arg Asn Gln Gln Val Arg Gln Ala Phe Met Asn Met Ala Arg 290 295 300

Lys Met Val Phe Phe Thr Ser Lys 305

<210> 1888 <211> 311 <212> PRT <213> Mus musculus

<400> 1888

Met Arg Asn His Thr Ile Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Gln Leu Lys Thr Leu Ile Phe Ile Phe Leu Phe Leu Ser Tyr 25 20 Val Leu Ser Met Thr Gly Asn Leu Thr Ile Ile Ser Leu Thr Phe Ile 40 Asp Pro His Leu Lys Thr Ala Met Tyr Phe Phe Leu Gln Asn Phe Ser 5.5 Phe Leu Glu Ile Ser Phe Thr Thr Ala Cys Ile Pro Arg Tyr Leu Tyr 75 70 Asn Ile Ser Thr Gly Asp Lys Thr Ile Thr Tyr Asn Asn Cys Ala Ile 90 8.5 Gln Ile Phe Cys Val Asp Leu Phe Gly Val Thr Glu Phe Phe Leu Leu 100 105 110 Ala Ile Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His 120 125 115 Tyr Ser Thr Ile Met Ser Ser Arg Ile Cys Thr Arg Leu Ile Leu Cys 135 140 Cys Trp Ala Ala Gly Leu Phe Val Ile Leu Pro Pro Leu Ser Leu Gly 150 155 Leu Lys Leu Glu Phe Cys Asp Ser Asn Val Ile Asp His Phe Val Cys 170 165 Asp Ala Asn Pro Leu Leu Lys Ile Ser Cys Thr Glu Thr Trp Leu Ile 185 190 180 Glu Gln Ile Val Ile Val Cys Ala Val Phe Thr Phe Ile Met Thr Leu 200 195 Val Cys Val Ser Leu Ser Tyr Ile Tyr Ile Ile Arg Thr Ile Leu Arg 215 220 Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser 230 235 His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr 245 250 Ile Lys Pro Ser Ala Lys Asp Ser Val Thr Ile Asn Lys Gly Val Thr 265 260 Ile Leu Thr Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr 280 Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Asp Ser Val Lys Arg 295 Ile Val Leu Phe Phe Gln Lys

```
<212> PRT
<213> Mus musculus
<400> 1889
Met Lys Asn Asn Thr Ile Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp
                                    10
Asp Pro Gln Leu Gln Ile Pro Ile Phe Val Phe Leu Phe Phe Ala Tyr
                                25
Met Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Ser Leu Thr Ile Leu
Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe Ser
Ile Leu Glu Ile Ser Phe Thr Ser Ala Cys Ile Pro Arg Tyr Leu Tyr
                                         75
Asn Ile Ala Thr Gly Asp Arg Ser Ile Thr Tyr Asn Val Cys Val Ile
Gln Val Phe Phe Thr Asp Val Phe Gly Val Ile Glu Phe Phe Leu Leu
                                105
Ala Ile Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
                                                 125
Tyr Val Thr Ile Met Ser Ser Lys Val Cys Gln Thr Leu Val Leu Cys
                        135
Cys Trp Ser Ala Gly Leu Leu Ile Ile Leu Pro Pro Leu Thr Leu Phe
                    150
                                         155
Leu Asn Leu Arg Phe Cys Asp Ser Asn Val Ile Asp Tyr Phe Phe Cys
                165
                                    170
Asp Ala Ser Pro Ile Leu Lys Ile Ser Cys Ser Asp Thr Trp Leu Ile
                                185
                                                     190
Glu Gln Leu Val Ile Val Cys Ala Val Leu Thr Phe Ile Leu Thr Leu
        195
                            200
Val Cys Val Thr Leu Ser Tyr Val His Ile Ile Lys Thr Ile Leu Arg
                        215
                                             220
Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                    230
                                         235
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
                                    250
Ile Asn Pro Ser Ala Lys Glu Ser Val Ala Ile Asn Lys Gly Val Ala
                                265
                                                     270
Val Leu Met Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr
                            280
Leu Arg Asn Lys Gln Val Arg Gln Ala Phe Ser Asp Ser Phe Lys Lys
                        295
Ile Ala Ile Ile Ser Met Lys Lys Glu Asn Val Gln Ile
<210> 1890
<211> 312
<212> PRT
<213> Mus musculus
<400> 1890
Met Arg Asn His Ser Met Val Thr Glu Phe Leu Leu Ser Gly Ile Ser
                                    10
Asp Thr Pro Glu Val Gln Val Val Ile Phe Ile Leu Leu Phe Ile Ala
            20
Tyr Ile Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu
                            40
```

<211> 317

```
Leu Asp Ser Gln Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe
Ser Phe Leu Glu Ile Ile Phe Thr Ser Val Ser Val Pro Arg Phe Leu
                    70
                                        75
Gly Ser Ile Ile Thr Glu Val Lys Thr Ile Ser Tyr Asn Asn Cys Leu
                                    90
Thr Gln Leu Tyr Phe Phe Leu Ser Leu Gly Val Ser Glu Phe Phe Leu
            100
Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Val Ile Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu
                                            140
   130
                        135
Thr Ser Trp Leu Ile Gly Phe Leu Ser Ile Phe Pro Leu Ile Met Leu
                    150
                                        155
Ile His Lys Leu Asp Phe Cys Ala Ser Asn Thr Ile Asp His Phe Cys
                165
                                    170
Cys Asp Tyr Phe Pro Ile Leu Gln Leu Ser Cys Ser Asp Thr Arg Leu
                                185
Leu Glu Ala Phe Gly Phe Tyr Cys Ala Ser Ile Thr Leu Leu Phe Thr
                            200
Leu Ala Leu Val Ile Leu Ser Tyr Ile Cys Ile Ile Asn Thr Ile Leu
                        215
Arg Phe Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                                    250
Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr Lys Gly Val
                                265
Ala Val Leu Asn Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Phe Ile Asn
                        295
                                            300
Lys Val Met Phe Asn Arg Asn Lys
305
                    310
```

```
<210> 1891
```

<400> 1891

Met Arg Asn His Ser Met Val Thr Glu Phe Val Leu Leu Gly Ile Ser 1 10 Asp Thr Pro Glu Val Gln Val Val Ile Phe Ile Leu Leu Phe Ile Ala 20 25 Tyr Ile Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu Leu Asp Ser Gln Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe 50 55 Ser Phe Leu Glu Ile Ile Phe Thr Ser Val Ser Ile Pro Arg Phe Leu 70 75 Glu Ser Ile Ile Thr Lys Val Lys Thr Ile Ser Tyr Asn Asn Cys Leu 90 95 Thr Gln Leu Tyr Phe Phe Leu Ser Leu Gly Val Ser Glu Phe Phe Leu 100 105 110 Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Val Ile Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu

<211> 312

<212> PRT

<213> Mus musculus

```
130
                        135
Thr Ser Trp Leu Ile Gly Phe Leu Ser Ile Phe Pro Leu Ile Met Leu
                    150
                                         155
Ile His Lys Leu Asp Phe Cys Ala Ser Asn Thr Ile Asp His Phe Cys
                                     170
                165
Cys Asp Tyr Phe Pro Ile Leu Gln Leu Ser Cys Ser Asp Thr Arg Leu
                                185
                                                     190
Leu Glu Ala Phe Gly Leu Tyr Cys Ala Ser Ile Thr Leu Leu Phe Thr
                            200
Leu Ala Leu Val Ile Leu Ser Tyr Ile Cys Ile Ile Asn Thr Ile Leu
                        215
                                             220
Arg Phe Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                         235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                245
                                     250
Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr Lys Gly Val
            260
                                265
                                                     270
Ala Val Leu Asn Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Leu Ile Asn
                                             300
Lys Leu Met Phe Asn Arg Asn Lys
305
                    310
<210> 1892
<211> 311
<212> PRT
<213> Mus musculus
<400> 1892
Met Arg Asn His Thr Val Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp
                                     10
Asp Pro Gln Leu Lys Thr Leu Ile Phe Ile Phe Leu Phe Leu Ser Tyr
                                25
Met Leu Ser Met Thr Gly Asn Leu Thr Ile Ile Ser Leu Thr Phe Ile
Asp Ser His Leu Lys Thr Ala Met Tyr Phe Phe Leu Gln Asn Phe Ser
                        55
Phe Leu Glu Ile Ser Phe Thr Thr Ala Cys Ile Pro Arg Tyr Leu Tyr
                    70
                                         75
                                                             80
Asn Ile Ser Thr Gly Asp Lys Thr Ile Thr Tyr Asn Asn Cys Val Ile
                8.5
                                                         95
Gln Ile Phe Cys Thr Asp Leu Phe Gly Val Thr Glu Phe Phe Leu Leu
            100
                                105
Ala Ile Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
        115
                                                 125
Tyr Ser Thr Ile Met Ser Ser Arg Ile Cys Ala Arg Leu Ile Leu Ser
                        135
                                             140
Cys Trp Ala Ala Gly Leu Phe Val Ile Leu Pro Pro Leu Ser Leu Gly
145
                    150
                                         155
Leu Lys Leu Lys Phe Cys Asp Ser Asn Val Ile Asp His Phe Val Cys
                165
                                    170
                                                         175
Asp Ala Asn Pro Leu Leu Lys Ile Ser Cys Thr Glu Thr Trp Leu Ile
            180
                                185
                                                     190
Glu Gln Ile Val Ile Val Ser Ala Val Leu Thr Phe Ile Thr Thr Leu
                            200
                                                 205
Leu Cys Val Ser Leu Ser Tyr Ile Tyr Ile Ile Arg Thr Ile Leu Arg
```

```
Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                    230
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
                245
                                    250
Ile Lys Pro Ser Ala Lys Asp Ser Val Thr Ile Asn Lys Gly Val Met
                                265
Val Leu Thr Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr
                            280
Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Asp Ser Val Lys Arg
   290
                        295
Ile Ala Leu Phe Phe Gln Lys
305
<210> 1893
<211> 313
<212> PRT
<213> Mus musculus
<400> 1893
Met Ser Val Ala Asn Glu Ser Ile Ser Arg Glu Phe Ile Leu Leu Gly
Phe Ser Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Val Val Phe Leu
            20
Val Ser Tyr Ile Leu Thr Ile Phe Gly Asn Met Met Ile Ile Leu Val
        35
                            40
Ser Arg Leu Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Thr
Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
                    70
Met Leu Ile Asn Ile Cys Ser Thr Arg Lys Val Ile Ser Tyr Gly Gly
                                    90
Cys Val Ala Gln Leu Phe Ile Phe Leu Ala Leu Gly Cys Thr Glu Cys
Phe Leu Leu Gly Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys Arg
                            120
                                                125
Pro Leu His Tyr Ser Val Ile Met His Gln Arg Arg Cys Leu Gln Leu
Ala Ala Cys Trp Ile Ser Gly Phe Ser Asn Ser Val Leu Gln Ser
                    150
                                        155
Thr Trp Thr Leu Gln Met Pro Leu Cys Gly His Asn Arg Val Asp His
                                    170
Phe Leu Cys Glu Ile Pro Ala Leu Leu Lys Leu Ser Cys Val Asp Thr
                                185
                                                    190
```

Thr Ala Ile Glu Ser Glu Gln Phe Phe Ile Ser Val Val Phe Leu Leu 200 Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Gln Ala 215 Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Gly Thr 230 235 Cys Gly Ser His Leu Ile Val Val Leu Phe Tyr Gly Thr Ala Ile 245 250 Tyr Met Tyr Leu Gln Pro Pro Ser Pro Thr Ser Lys Asp Arg Gly Lys 260 265 270 Met Val Ser Leu Phe Tyr Gly Ile Ile Thr Pro Met Leu Asn Pro Leu 275 280 285 Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Phe Lys Arg Leu 295 290 300 Val Thr Arg Ile Ile Leu Ser Arg Lys

```
<210> 1894
<211> 313
<212> PRT
<213> Mus musculus
<400> 1894
Met Ser Trp Ala Asn Glu Ser Ile Thr Gly Glu Phe Val Leu Leu Gly
                                     10
Phe Ser Asp Gln Pro Trp Leu Glu Phe Pro Leu Phe Val Val Phe Leu
Thr Ser Tyr Ile Val Thr Ile Phe Gly Asn Leu Asn Ile Ile Leu Val
        35
                            40
Ser His Leu Asp Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Thr
Asn Leu Ser Val Ile Asp Leu Cys Tyr Ile Thr Cys Thr Val Pro Gln
                    70
Met Leu Val Asn Leu Arg Ser Ile Arg Lys Val Ile Ser Phe Gly Gly
                                     90
Cys Val Val Gln Leu Phe Met Phe Leu Ala Leu Gly Ala Thr Glu Cys
            100
                                 105
                                                     110
Val Leu Leu Pro Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys Arg
                            120
                                                 125
Pro Leu His Tyr Ser Val Ile Met His Gln Arg Leu Cys Leu Gln Leu
                        135
                                             140
Ala Ala Val Ser Trp Ile Ile Gly Phe Gly Asn Ser Val Trp Leu Ser
                    150
                                         155
                                                             160
Ile Leu Thr Leu Gln Leu Pro Arg Cys Gly His Tyr Val Ile Asp His
                                     170
                                                         175
Phe Leu Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Asp Val
            180
                                 185
                                                     190
Thr Ala Asn Glu Ala Glu Leu Phe Phe Val Ser Val Phe Phe His Leu
        195
                            200
                                                 205
Thr Pro Leu Ser Leu Ile Leu Thr Ser Tyr Ala Phe Ile Ala Arg Ala
                        215
                                             220
Ile Leu Lys Ile Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr
                    230
                                         235
Cys Ser Ser His Leu Ile Val Val Ser Leu Phe Tyr Gly Thr Ala Leu
                                     250
Ser Val Tyr Leu Leu Pro Pro Ser Pro His Ser Lys Asn Arg Arg Lys
                                 265
Met Val Pro Leu Phe Tyr Gly Ile Ile Ala Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Asp Ala Phe Lys Arg Leu
                        295
Ile Lys Arg Val Phe Leu Ser Lys Asn
                    310
<210> 1895
<211> 317
<212> PRT
<213> Mus musculus
<400> 1895
Met Trp Leu Gln Val Met Glu Lys Glu Asn Thr Ser Ser Phe Glu Gly
```

```
Phe Ile Leu Val Gly Phe Ser Asp Arg Pro His Leu Glu Leu Ile Leu
Phe Val Val Leu Ser Phe Tyr Leu Leu Thr Leu Leu Gly Asn Met
                            40
Thr Ile Ile Leu Leu Ser Ala Leu Asp Ser Arg Leu His Thr Pro Met
                        55
Tyr Phe Phe Leu Ala Asn Leu Ser Phe Leu Asp Met Cys Phe Thr Thr
                    70
                                        75
Gly Ser Ile Pro Gln Met Leu Tyr Asn Leu Trp Gly Pro Asp Lys Thr
Ile Ser Tyr Val Gly Cys Ala Ile Gln Leu Tyr Phe Val Leu Ala Leu
                                105
Gly Gly Val Glu Cys Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr
        115
                            120
                                                125
Ala Ala Val Cys Lys Pro Leu His Tyr Thr Val Ile Met His Pro Arg
                        135
Leu Cys Gly Gln Leu Ala Ser Val Ala Trp Leu Ser Gly Phe Gly Asn
                    150
                                        155
Ser Leu Ile Met Ala Pro Gln Thr Leu Met Leu Pro Arg Cys Gly His
                                    170
                                                         175
Arg Arg Val Asp His Phe Leu Cys Glu Met Pro Ala Leu Ile Gly Met
            180
                                185
Ala Cys Val Asp Thr Met Ala Leu Glu Ala Leu Ala Phe Ala Leu Ala
        195
                            200
Ile Phe Ile Ile Leu Ala Pro Leu Ile Leu Ile Leu Ile Ser Tyr Gly
                        215
Tyr Ile Ala Arg Ala Val Phe Arg Ile Lys Ser Ala Ala Gly Arg Arg
                    230
                                        235
Lys Ala Phe Asn Thr Cys Ser Ser His Leu Ile Val Val Ser Leu Phe
                245
                                    250
Tyr Gly Thr Ile Ile Tyr Met Tyr Leu Gln Pro Ala Asn Thr Tyr Ser
                                265
Gln Asp Gln Gly Lys Phe Leu Thr Leu Phe Tyr Thr Ile Val Thr Pro
                            280
Ser Val Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Glu
                        295
Ala Val Lys Lys Val Leu Gly Lys Gly Ser Ile Glu Val
305
                    310
```

```
<210> 1896
```

<400> 1896

 Met His Ala Leu Thr Val Asn Ala Met Ile Asn Gln Ser Cys Gln Glu 1

 Gln Phe Ile Leu Leu Gly Phe Ser Asp Arg Pro Arg Leu Glu Ser Ile 20

 Leu Phe Val Phe Val Leu Ile Phe Tyr Leu Val Thr Leu Val Gly Asn 35

 Ile Ile Ile Ile Leu Val Ser Tyr Leu Asp Pro Cys Leu His Thr Pro 50

 Met Tyr Phe Phe Leu Thr Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr 65

 Thr Ser Ser Ile Pro Gln Leu Leu Phe Asn Leu Gly Gly Gln Asp Lys 90

 Ser Ile Ser Tyr Ile Gly Cys Ala Val Gln Leu Phe Met Phe Leu Gly

<211> 314

<212> PRT

<213> Mus musculus

```
100
                                105
Leu Gly Gly Thr Glu Cys Val Leu Leu Ala Val Met Ala Tyr Asp Arg
                            120
                                                 125
       115
Phe Thr Ala Ile Cys Lys Pro Leu His Tyr Ser Val Ile Met His Ser
                        135
                                             140
Gln Leu Cys Trp Thr Leu Val Ser Val Ala Trp Ser Val Gly Leu Leu
                    150
                                         155
Asn Ser Leu Val Met Ser Pro Val Thr Met Lys Leu Pro Arg Cys Gly
                                    170
                                                         175
Arg Cys Gln Val Arg His Phe Leu Cys Glu Met Pro Ala Leu Ile Lys
                                185
                                                     190
Ile Ala Cys Val Asp Thr Val Ala Val Glu Ser Thr Val Phe Ile Leu
        195
                            200
                                                 205
Ser Val Ile Ile Val Leu Val Pro Leu Thr Leu Ile Leu Ile Ser Tyr
Ser Tyr Ile Ala Leu Ala Val Met Arg Ile Lys Ser Ala Ser Gly Arg
                                         235
                    230
Arg Lys Ala Phe Asn Thr Cys Gly Ser His Leu Thr Val Val Ser Leu
                                     250
Phe Tyr Gly Asn Ile Ile Tyr Met Tyr Met Gln Pro Gly His Lys Ala
                                265
                                                     270
Ser Gln Asp Gln Gly Lys Phe Leu Thr Leu Phe Tyr Asn Leu Val Thr
        275
                            280
Pro Met Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys
                        295
Gly Ala Leu Lys Arg Leu Val Thr Thr Lys
                    310
<210> 1897
<211> 308
<212> PRT
<213> Mus musculus
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<400> 1897

Met Gly Thr Ser Asn Val Ser Ser Asn Ser Asp Phe Ile Leu Met Gly Leu Leu Ser Tyr Thr Gly Pro His Leu Val Leu Phe Phe Leu Met Ala 20 Thr Val Phe Ile Ile Gly Leu Leu Gly Asn Thr Thr Leu Leu Phe Leu Ile Ala Thr Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser Gln Leu Ser Leu Leu Asp Val Gly Phe Pro Leu Val Thr Ile Pro Lys 70 Val Val Ala Glu Phe Leu Gln Gly Gln Asn Val Ile Ser Phe Gly Gly 90 Cys Ala Thr Gln Met Phe Phe Leu Met Leu Met Gly Val Ser Glu Gly 105 110 Val Leu Leu Ser Leu Met Ser Tyr Asp Arg Tyr Val Ala Val Cys His 120 Pro Leu His Tyr Gln Val Leu Met Arg Asn Gln Val Cys Leu Val Met 135 140 Val Gly Ala Ser Trp Phe Ser Gly Ala Leu Val Ala Ser Ile Gln Thr 150 155 Ser Ile Thr Leu Gln Phe Pro Tyr Cys Ala Ser His Thr Val Asp His 170 175 Phe Phe Cys Glu Leu Pro Ala Leu Leu Lys Leu Ser Cys Ala Asp Thr 185 190

```
Ser Ala Tyr Glu Leu Ala Leu Ser Ile Ser Gly Val Leu Ile Leu Leu
        195
                            200
Leu Pro Leu Ser Leu Ile Phe Ile Ser Tyr Gly His Val Leu Gly Ala
                        215
                                            220
Val Leu Leu Met Arg Ser Ala Glu Ala Arg His Lys Ala Phe Thr Thr
                    230
                                         235
Cys Ser Ser His Val Thr Val Val Gly Leu Phe Phe Gly Ala Ala Val
                                    250
Phe Ile Tyr Met Val Pro Gly Ser Tyr His Ser Pro Lys Gln Asp Asn
                                265
Val Val Ser Leu Phe Tyr Ser Leu Ile Thr Pro Thr Leu Asn Pro Leu
        275
                            280
Ile Tyr Ser Leu Arg Asn Arg Glu Val Arg Met Ser Leu Gly Gln Gly
   290
                        295
                                            300
Tyr Gly Gln Val
305
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<210> 1898 <211> 309 <212> PRT

<213> Mus musculus

<400> 1898

Met Lys Thr Pro Ser Asn Ser Thr Glu Ala Asp Phe Ile Leu Leu Gly 10 Leu Phe Ser His Thr His Ala His Ser Leu Leu Ser Val Val Leu Val Ile Phe Thr Ala Ser Leu Met Gly Asn Thr Leu Met Ile Leu Leu Ile Cys Arg Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser Gln Leu Ser Leu Met Asp Met Met Leu Val Ser Thr Ile Val Pro Lys 70 Met Ala Ala Asn Tyr Leu Thr Ser Thr Arg Ser Ile Ser Pro Ala Gly 85 90 Cys Gly Ser Gln Ile Phe Leu Phe Leu Thr Leu Ala Gly Gly Glu Cys 105 110 Phe Leu Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Phe 120 Pro Leu Arg Tyr His Val Leu Met Asn Pro Lys Leu Cys Ala Tyr Leu 135 140 Thr Val Gly Ser Trp Leu Leu Gly Ala Ala Asp Gly Leu Met Gln Ala 150 155 Gly Thr Ile Leu Ser Phe Pro Phe Cys His Ser Arg Thr Ile Asn His 170 Phe Phe Cys Glu Ala Pro Ser Leu Val Arg Leu Ala Cys Ala Asp Thr 185 190 Lys Val Phe Glu Phe Phe Met Tyr Ile Cys Cys Ile Leu Met Leu Leu 200 205 Ile Pro Leu Ser Leu Val Leu Ala Ser Tyr Ser Leu Ile Leu Ala Thr 215 220 Val Leu Arg Met Arg Ser Ser Ala Ala Arg Lys Lys Ala Phe Thr Thr 230 235 Cys Ser Ser His Leu Ala Val Val Gly Leu Phe Tyr Gly Ala Ile Ile 245 250 Phe Ile Tyr Met Arg Pro Lys Ser His Gln Pro Gly Lys Ser Asp Lys 265 Val Val Ser Ala Phe Tyr Thr Ile Phe Thr Pro Val Leu Asn Pro Leu

```
Ile Tyr Ser Val Arg Asn Lys Glu Val Lys Gly Ala Leu Arg Lys Trp
                        295
                                             300
   290
Leu Gln Lys Thr Val
305
<210> 1899
<211> 308
<212> PRT
<213> Mus musculus
<400> 1899
Met Ser Asn His Thr Arg Val Thr His Phe Ile Leu Arg Gly Phe Ser
                                    10
Asp Val Pro Gln Leu Arg Leu Val Leu Ile Pro Phe Phe Leu Leu Phe
                                25
Tyr Thr Phe Gly Ile Leu Gly Asn Phe Ser Ile Ile Thr Ala Val Ile
                            40
Arg Asp Ser Arg Leu His Ser Pro Met Tyr Phe Phe Leu Lys Asn Leu
Ser Phe Leu Asp Ile Cys Tyr Thr Ser Ala Thr Ile Pro Lys Ala Val
                    70
Val Ile Ser Leu Thr Gly Ser Gly Val Ile Ser Tyr Gln Glu Cys Val
                                    90
Ala Gln Leu Tyr Met Phe Ile Thr Leu Cys Gly Thr Glu Cys Phe Leu
            100
                                105
                                                     110
Leu Thr Ala Met Ala Tyr Asp Arg Cys Leu Ala Ile Leu Arg Pro Leu
                            120
Ile Tyr Gly Thr Ile Met Ser His Lys Tyr Cys Ser Ala Leu Val Val
                                             140
Thr Ala Trp Val Gly Gly Ala Ile Tyr Ser Ala Phe His Thr Phe Asn
                    150
                                         155
Thr Phe Ser Leu Pro Tyr Cys Gly Pro Asn Val Val Asp His Phe Phe
                                    170
Cys Asp Met Pro Pro Val Met Arg Leu Ser Cys Thr Asp Tyr His Leu
                                185
                                                     190
Asn Glu Glu Val Gly Phe Ala Val Ile Gly Cys Ile Ile Met Ser Ser
                            200
Phe Ala Leu Thr Val Val Ser Tyr Ile Gly Ile Val Ala Thr Val Leu
                                             220
Arg Ile Pro Ser Val Glu Gly Arg Trp Lys Ala Phe Ser Thr Cys Ser
                    230
Ser His Leu Thr Thr Val Ile Leu Phe Tyr Gly Thr Gly Ser Phe Val
                                    250
Tyr Leu Arg Pro Ala Ser Gln Tyr Ser Pro Thr Leu Asp Pro Leu Ala
                                265
                                                     270
Ser Ile Phe Tyr Ser Val Val Thr Pro Ser Leu Asn Pro Val Ile Tyr
                            280
Cys Leu Arg Asn Lys Asp Met Lys Phe Ala Leu Gln Lys Leu Tyr Cys
                        295
                                             300
Gly Arg Lys Tyr
305
<210> 1900
<211> 308
<212> PRT
<213> Mus musculus
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Asp Val Pro Gln Leu Arg Leu Met Ala Ile Pro Val Phe Leu Leu Ile
                                25
Tyr Thr Phe Gly Leu Leu Gly Asn Leu Ser Ile Ile Thr Ala Val Thr
Arg Asp Ser Arg Leu His Ser Pro Met Tyr Phe Phe Leu Lys Asn Leu
Ser Phe Leu Asp Ile Cys Tyr Thr Ser Ala Thr Ile Pro Lys Ala Val
                    70
                                         75
Val Ile Ser Leu Thr Gly Ser Gly Val Ile Ser Tyr Gln Glu Cys Ala
                                    90
                                                         95
Ala Gln Leu Tyr Ile Phe Leu Thr Phe Ser Ser Glu Cys Phe Leu
                                105
                                                    110
            100
Leu Thr Ala Met Ala Tyr Asp Arg Cys Leu Ala Ile Leu Arg Pro Leu
                            120
                                                125
Leu Tyr Gly Thr Ile Met Ser Gln Lys Tyr Cys Ser Ala Leu Val Val
                                            140
Thr Ala Trp Val Gly Gly Ala Ile Tyr Ser Ala Phe His Thr Phe Asn
                    150
                                         155
Thr Phe Ser Leu Pro Tyr Cys Gly Pro Asn Val Ile Asp His Phe Phe
                                    170
Cys Asp Ile Pro Pro Val Met Arg Leu Ser Cys Thr Asp Tyr His Leu
                                185
                                                     190
            180
Ser Glu Glu Val Gly Phe Ala Val Ser Ser Cys Ile Val Met Ser Ser
                                                 205
Phe Ala Leu Thr Val Val Ser Tyr Ile Gly Ile Val Ala Thr Val Leu
                                             220
Arg Ile Pro Ser Val Glu Gly Arg Trp Lys Ala Phe Ser Thr Cys Ser
                                         235
                    230
Ser His Leu Thr Thr Val Ile Leu Phe Tyr Gly Thr Gly Ser Phe Val
                                    250
Tyr Leu Arg Pro Ala Ser Gln Tyr Ser Pro Thr Leu Gly Arg Leu Ala
                                                     270
            260
                                265
Ser Ile Phe Tyr Ser Val Val Thr Pro Ser Leu Asn Pro Val Val Tyr
                            280
Cys Leu Arq Asn Lys Asp Met Lys Phe Ala Leu Gln Lys Leu Tyr Cys
                        295
Gly Arg Lys Tyr
305
<210> 1901
<211> 316
<212> PRT
<213> Mus musculus
<400> 1901
Met Asn Leu Gly Asn Glu Ser Ala Pro Lys Ile Phe Ile Leu Leu Gly
                                    10
Phe Ser Ser His Pro Trp Leu Glu Met Pro Leu Phe Ile Met Val Leu
            20
Val Ala Tyr Val Cys Thr Val Leu Gly Asn Ile Ser Ile Ile Val Val
                                                 4.5
        35
                            40
Ser Arg Arg Asp Pro Gln Leu Asp Ser Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Thr Ile Pro Gln
```

Met Ser Asn His Thr Arg Val Thr His Phe Ile Leu Arg Gly Phe Ser

10

<400> 1900

```
70
65
Leu Leu Arg Asn Leu Trp Gly Pro Asp Lys Ser Ile Ser Tyr Gly Gly
                                    90
Cys Val Thr Gln Phe Tyr Ile Phe His Phe Leu Gly Ala Thr Glu Cys
            100
                                105
Ile Leu Leu Ala Val Met Ser Leu Asp Arg Tyr Ile Ala Ile Cys Lys
                            120
        115
Pro Leu Arg Tyr Pro Ala Ile Met His Gln Gln Leu Cys Ile Leu Leu
                        135
                                            140
Val Ser Met Ala Trp Leu Ser Gly Leu Ala Asn Ser Leu Leu Gln Ser
                    150
                                        155
Thr Leu Thr Val Lys Leu Pro Phe Cys Gly Asn Asn Lys Val Asp Asn
                165
                                    170
                                                         175
Phe Leu Cys Glu Val Pro Val Met Ile Lys Met Ser Cys Ala Asn Thr
            180
                                185
                                                    190
Ala Phe Asn Ile Ala Met Leu Ser Ile Val Gly Thr Phe Tyr Ser Leu
                            200
        195
Val Pro Leu Ser Leu Ile Leu Ile Ser Tyr Gly Phe Ile Val Ala Thr
                        215
Val Leu Arg Ile Arg Ser Ser Glu Gly Lys Lys Lys Ala Phe Asn Thr
                    230
                                        235
Cys Gly Ser His Val Val Val Thr Leu Phe Tyr Gly Pro Val Ile
                245
                                    250
Ser Met Tyr Val Gln Pro Ser Ser Ser Asn Ser Gln Asp Lys Asn Lys
            260
                                265
Leu Leu Ser Leu Phe Tyr Ser Leu Val Thr Pro Met Leu Asn Pro Phe
        275
                            280
Ile Tyr Thr Leu Arg Asn Lys Asp Met Lys Gly Ala Met Lys Arg Leu
                        295
Leu Val Ser Leu Tyr His Lys Gly Ala Glu Gln Thr
                    310
```

<210> 1902

<211> 314

<212> PRT

<213> Mus musculus

<400> 1902

Met Glu Ile Asn Asn Lys Ser Ser Glu Thr Asp Phe Ile Leu Leu Gly 10 Phe Ser Ser Arg Pro Gln Leu Glu His Ile Ile Ser Ala Val Val Phe 25 Val Phe Tyr Ile Val Thr Leu Val Gly Asn Thr Thr Ile Ile Leu Val 40 Ser Tyr Leu Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Val Asp Leu Cys Tyr Thr Thr Ser Ile Val Pro Gln 70 Met Leu Val Asn Leu Trp Gly Pro Lys Lys Ser Ile Thr Tyr Gly Gly 90 Cys Val Leu Gln Phe Phe Ala Leu Asp Leu Gly Ala Thr Glu Cys 100 105 Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Gln 120 Pro Leu His Tyr Thr Val Ile Met His Pro Val Leu Cys Gln Lys Met 140 135 Val Leu Ser Ala Trp Leu Gly Gly Leu Gly Ser Ala Leu Ile Leu Cys 155

```
Ser Leu Thr Leu Lys Leu Pro Arg Cys Gly His Arg Glu Val Asp Asn
                                    170
Phe Phe Cys Glu Met Pro Ala Leu Ile Lys Met Ala Cys Val Tyr Ser
Arg Val Ile Glu Ile Val Val Phe Thr Leu Gly Val Ile Phe Leu Leu
       195
                            200
Val Pro Leu Ser Leu Ile Leu Ile Ser Tyr Ala Val Ile Thr Gln Ala
                        215
Val Met Lys Ile Lys Ser Ala Thr Arg Trp Arg Lys Val Leu Asn Thr
                                        235
                    230
Cys Gly Ser His Leu Thr Val Val Thr Leu Phe Tyr Gly Thr Leu Ile
                245
                                    250
Tyr Met Tyr Met Lys Pro Gln Asn Thr Ile Ser His Glu Glu Gly Gln
            260
                                265
Phe Phe Thr Leu Phe Tyr Thr Ile Val Thr Pro Ser Leu Asn Pro Leu
                            280
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Asn Ala Val Lys Arg Ile
                        295
Leu Gly Met Asp Lys His Ser Gly Lys Val
                    310
```

<210> 1903

<211> 316

<212> PRT

<213> Mus musculus

<400> 1903

Met Ser Val Asn Arg Ile Ser Ala Asp Phe Pro Glu Asp Phe Ile Leu 10 Met Gly Phe Thr Lys Tyr Pro Trp Leu Asp Leu Pro Leu Phe Phe Val 25 Leu Leu Thr Ser Tyr Met Phe Thr Leu Leu Gly Asn Ile Ala Ile Ile 40 Leu Val Ser Gln Leu Asp Ser Gln Leu Gln Ser Pro Met Tyr Phe Phe 55 Leu Thr Ser Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Val 70 75 Pro Gln Met Leu Phe Asn Leu Gln Gly Pro Asn Lys Asn Ile Thr Tyr 90 85 Ile Gly Cys Met Ala Gln Ala Tyr Val Phe His Trp Leu Gly Cys Thr 105 100 110 Glu Cys Val Leu Leu Gly Ile Met Ala Leu Asp Arg Tyr Val Ala Val 125 115 120 Cys Lys Pro Leu Arg Tyr Ser Val Ile Met Asp His Arg Leu Cys Leu 135 140 Gln Leu Ser Gly Ala Ala Trp Leu Thr Gly Leu Ala Asn Ser Leu Leu 150 155 Gln Ser Thr Leu Thr Ile Gln Leu Pro Leu Cys Gly Asn Arg Met Leu 170 175 165 Asp His Phe Phe Cys Glu Leu Pro Gly Leu Ile Lys Met Ser Cys Gly 180 185 190 Asp Thr Thr Val Asn Glu Val Thr Leu Ala Val Val Ala Thr Phe Phe 200 195 Ile Met Gly Pro Leu Ser Met Ile Leu Val Ser Tyr Ser Tyr Ile Ala 215 220 Gln Thr Val Phe Arg Met Pro Ser Ala Ala Gly Arg Leu Lys Ala Phe 230 Asn Thr Cys Ser Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Pro

```
245
                                     250
Gly Ile Tyr Ile Tyr Met Gln Pro Ser Glu Asp Gly Ser Gln Asp Leu
            260
                                265
                                                     270
Ile Lys Val Leu Thr Leu Phe Tyr Cys Val Ile Thr Pro Met Ala Asn
                            280
                                                 285
Pro Phe Ile Tyr Thr Leu Arg Asn Lys Asp Val Ile Gly Ala Leu Lys
                        295
                                             300
Arg Leu Leu Arg Lys Ala Ile Ser Thr Lys Gly Ile
                    310
<210> 1904
<211> 316
<212> PRT
<213> Mus musculus
<400> 1904
Met Ala Tyr Glu Val Met Asn Gln Thr Ser Ala Thr Thr Phe Ile Leu
                                     10
Val Gly Phe Ser Glu Tyr Pro Gln Leu Gln Ile Pro Leu Phe Leu Leu
                                25
Phe Leu Thr Ile Tyr Ser Val Thr Leu Met Gly Asn Leu Gly Ile Leu
Val Val Ile Lys Gly Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe
                        55
Leu Ser His Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Phe Thr
                    70
                                         75
Pro Lys Leu Leu Gln Ile Leu Ile Met Glu Asp Arg Thr Ile Ser Phe
                                     90
Ile Gly Cys Met Ile Gln Phe Phe Phe Ile Cys Thr Phe Val Ile Thr
            100
                                105
                                                     110
Glu Met Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
        115
                            120
                                                 125
Cys Asn Pro Leu Leu Tyr Thr Val Val Met Pro Phe Gln Phe Cys Ala
                        135
Leu Leu Val Ala Gly Thr Tyr Met Ile Gly Gly Leu Cys Ala Val Ile
                    150
Leu Ile Tyr Thr Leu Leu Gln Leu Ser Tyr Cys Glu Tyr Gly Ile Ile
                                    170
Asn His Phe Gly Cys Glu Tyr Ser Ala Val Ile Ser Val Ser Cys Ser
            180
                                185
Asp Ser Ser Phe Ser Gln Leu Ala Cys Leu Val Ile Ser Ile Phe Ser
                            200
Glu Ser Ser Ser Val Leu Ile Thr Leu Ala Ser Tyr Val Phe Ile Val
                        215
                                             220
Val Thr Ile Ile Lys Met Pro Ser Lys Gly Gly Leu Arg Lys Ala Phe
                    230
                                        235
Ser Thr Cys Thr Ser His Leu Thr Ala Ile Ser Ile Phe His Gly Ile
                                     250
Ile Leu Leu Tyr Cys Val Pro Asn Ser Asn Ser Ser Arg Leu Phe
            260
                                265
                                                    270
Val Lys Val Ala Thr Ala Leu Tyr Thr Val Met Ile Pro Met Leu Asn
        275
                            280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Arg
                        295
                                             300
Arg Leu Ile Ser Ser Lys Leu His Ser His Leu Thr
                    310
```

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<210> 1905
<211> 312
<212> PRT
<213> Mus musculus
<400> 1905
Met Ile Asn Gln Ser Ser Val Thr Thr Phe Ile Leu Val Gly Phe Ser
                                    10
Glu Tyr Pro His Leu Gln Pro Pro Leu Phe Leu Met Val Met Thr Ile
            20
                                25
Tyr Thr Val Thr Leu Val Gly Asn Val Gly Ile Ile Leu Val Arg Arg
Ile Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu
                        55
Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Val Thr Pro Lys Leu Leu
                    70
Glu Ile Leu Ile Val Glu His Arg Thr Ile Ser Leu Asn Gly Cys Met
                                    90
                                                         95
Thr Gln Phe Phe Gly Cys Ala Cys Val Ile Thr Glu Met Phe Met
                                105
Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Asn Pro Leu
                            120
                                                125
Leu Tyr Thr Val Ala Met Ser His Gln Leu Cys Ala Leu Leu Val Ala
Gly Ser Tyr Met Trp Gly Gly Leu Cys Ala Val Ile Ile Thr Tyr Thr
                    150
Leu Val Glu Leu Ser Tyr Cys Glu Pro Gly Ile Ile Asp His Phe Gly
                                    170
                165
Cys Glu Tyr Ser Ala Ile Val Ser Val Ser Cys Ser Asp Pro Ser Phe
            180
                                185
                                                    190
Ser Gln Met Val Cys Leu Val Ile Ser Ile Leu Ser Glu Gly Ser Ser
                            200
Leu Leu Ile Thr Met Ala Ser Tyr Val Phe Ile Val Val Thr Ile Ile
                        215
                                            220
Lys Met Pro Ser Lys Asp Gly Leu Arg Lys Ala Phe Ser Thr Cys Thr
                    230
                                        235
Ser His Leu Thr Ala Ile Ser Ile Phe His Gly Ile Ile Leu Leu Leu
                                    250
Tyr Cys Ile Pro Asn Ala Lys Ser Ser Lys Leu Leu Val Lys Val Ala
            260
                                265
Thr Val Leu Tyr Thr Val Leu Ile Pro Met Leu Asn Pro Leu Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Glu Thr Val Lys Arg Leu Ile Ser
                        295
Ser Lys Leu His Ser Gln Thr Ile
305
<210> 1906
<211> 303
<212> PRT
<213> Mus musculus
<400> 1906
Met Tyr Asn His Thr Met Thr Glu Phe Ile Leu Phe Gly Leu Thr Gln
                                    10
Asp Pro Glu Gln Gln Lys Ala Ile Phe Gly Val Phe Leu Ile Leu Tyr
                                25
Leu Met Thr Leu Met Gly Asn Phe Leu Ile Met Val Thr Ile Lys Met
```